



**ROLE OF INDUSTRIAL ESTATE OF ALIGARH
IN THE PROMOTION OF SMALL SCALE
INDUSTRIES IN THE ALIGARH DISTRICT**

DISSERTATION

SUBMITTED FOR THE AWARD OF THE DEGREE OF

Master of Philosophy

IN

COMMERCE

BY

NASIR NAEEM

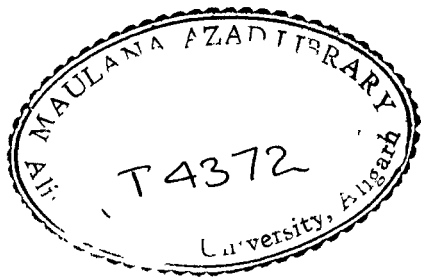
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CERTIFICATE

This is to certify that the dissertation entitled "Role of Industrial Estate of Aligarh In the promotion of Small Scale Industries in the ^{Aligarh} district", Submitted by Mr. Nasir Naeem for the award of the Degree of Master of Philosophy in Commerce is an original work carried out by him under my supervision. In my opinion, this work is worthy for the submission for the award of Degree of Master of Philosophy in Commerce.



Aligarh

(Dr. ZIAUDDIN KHAIROOWALA)

August 4, 1993

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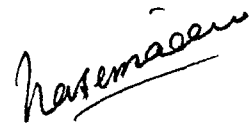
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(NASIR NAEEM)

CHAPTER - 1

CHAPTER - 1

I N T R O D U C T I O N

The establishment of Industrial Estate in India is mainly an economic lesson drawn from Britain. The idea of Industrial Estate was originally suggested by the International Planning Team, assembled with the aid of the Ford Foundation which undertook a study of small industries in India and made recommendations for their future development. This technique of industrialisation in India was recommended by the Small Scale Industries Board in 1955. It was decided that the tool of Industrial Estate should be adopted for the development of small industries. The first Industrial Estate in India was set up at Rajkot (Gujrat) in September 1955 and the first shed was allotted in December 1955.

The Principal objective of Industrial Estate programme was to provide factory accommodation to small industries at suitable sites with many infra-structural facilities, encourage growth of ancillary industries, maintenance of Uniform standards in production, stimulation of industrialization in economically backward and rural areas, and to provide conditions favourable to working efficiency.

The additional objectives of Industrial Estates are slum clearance, relieving the cities of over-crowding and promotion of Small Scale Industries units, as ancillary to large industrial units.

Since the very inception of the adoption of programme of Industrial Estate in India, the concepts, objectives and the working of these Estates in various states have been the subject of debate and discussions. Right from the beginning these Estates have been making an overall progress and have proved to be the backbone of development of a state.

But there have, however, been some pitfalls in the working of these Estates in almost all the states and union territories of the country where they are running on account of certain internal and external factors.

In the present study entitled, "Role of Industrial Estate of Aligarh in the promotion of Small Scale Industries in the Aligarh district" a modest endeavour has been made to critically analyse the working and performance of Industrial Estates in Aligarh district in U.P.

REVIEW OF LITERATURE:

Many scholars have studied the various aspects of Industrial Estate in India. It is, therefore, necessary to have a brief review of some of the important works done so far in this field.

P.C. Alexander¹ (1960) pointed out that the Industrial Estates programme in India had roused great interest in other developing countries and many of them were keen to know the lessons of India's experiments in this field. He further observed that to expand this programme considerably during the Third Five Year Plan, an assessment of the programme is essential to make it useful in planning for the future.

K.N. Srinivasan² (1980) explains that SIDCO plays an important role in the development of Industrial Estates in Tamil Nadu. He further observes that Industrial Estates in Tamil Nadu are fully equipped and functioning well.

V.R. Raman³ (1980) pointed out that Ambattur Estate in Tamil Nadu needs a face lift, and further observed that it is one of the biggest Industrial Estates in south-east.

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1. Alexander, P.C.; "Industrial Estate in India", Asia Publishing House, Bombay, 1960.
 2. Srinivasan, K.N.; "Industrial Estate in Tamil Nadu", Economic Times, September 23, 1980, pp. 1-4.
 3. Raman, V.R.; "Ambattur Estate needs a face lift", Economic Times, September 23, 1980, p-IV.

He identified that it has many facilities, i.e. excellent infrastructural facilities, vast product market, huge hinterland, well connected rails and roads, easy procurement of raw materials or dispatch of manufactured goods and availability of technical manpower etc.

V. Lavakumar¹ (1980) made different observations regarding the Small Scale Industries in Ambattur Avadi-Padi Industrial complex. He remarked that this Industrial Estate is facing a number of difficulties, such as high sale price of plots, poor transport facilities, housing facilities, municipal facilities, marketing facilities, erratic power supply, telephone, telex and postal facilities, lack of metallic and other minerals and lack of raw materials.

P.V. Krishna² (1981) has studied that Malappuram district is predominantly an agricultural and backward district. Kerala state Government has massive programme to develop the mini Industrial Estates for the development of rapid industrialisation by utilising fully available raw material and other resources, and providing gainful

-
1. Lava Kumar, V.; "Ambattur-Avadi-Padi Industrial Complex problems & prospects of small industries", Economic Times, September 23, 1980, pp. 1-4.
 2. Krishna, P.V.; "Evaluation of working of Industrial Estates, in Malappuram district", Economic Times, June 12, 1981, p.5.

employment opportunities to the self employed and other unemployed youth.

D.P. Changhas¹ (1982) has stated that total outlay for Haryana Industrial Estates was higher than the total outlay of India. He has also infacted low utilisation of sheds. Nepotism and corruption and allocation of scarce raw materials, imported components and equipments.

Haryana Industrial Estates has been sluggish in the growth of Small Scale Industries due to the lack of credit facilities, shortage of power, lack of matallic and other minerals, lack of raw material, lack of industrial extension services and marketing facilities.

Yogesh Chandra² (1985) pointed out that "Noida Industrial Estate-An integrated industrial township" has unique administrative experiment in the following three areas:

1. adoption of an overall area development strategy convering the residential township as well as villages;

-
1. Ghanghas, D.P.; "Industrial Estate in Haryana", An appraisal: Yojana, June 16-30, 1982, pp. 22-24.
 2. Chandra Yogesh; "Noida Industrial Estate-An integrated Industrial township", Times of India, November 12, 1985, p-18.

2. the setting up and development of small scale and tiny industries; and
3. the preservation and development of ecology and environment.

He further remarked that Noida is a home for small industrial units in a self supporting integrated system. He also made study that Industrial township has some facilities i.e. multi-disciplinary facilities, commercial facilities, institutional facilities and residential facilities etc.

Anup K. Bhandari¹ (1985) reviewed, "Marketing of Noida Product" and remarked that in Noida Industrial Complex, majority of the entrepreneurs are technically qualified, young and dynamic. He further said that there is a selfless urge in them to manufacture goods of the best quality.

Anand Vardhan² (1985) observed that the Delhi Small Industries Development Corporation (DSIDC) is an agency for promoting the small enterprises in capital and is now proposing to enter into joint ventures, particularly in the sphere of high technology non-polluting industries. He further studied that corporation proposes to enter into a joint venture for manufacturing magnetic ink coating, floppy disc and kits.

1. Bhandari Anup, K.; "Marketing of Noida Products", Times of India, November 12, 1985, p.18.

2. Vardhan Anand, "DISCO to go in for joint ventures", Economic Times, July 5, 1985, p.1.

Tyagaraj Sharma¹ (1985) identified that Mayapuri and Naraina Industrial Estates in Delhi are today associated with a wide range of products for domestic and export markets. He further said that these two Estates together boasted a number of units producing different types of products ranging from ready made garments, plastics, cosmetics, engineering, glassware, hosiery, T.V. sets and components, radios, scientific and optical instruments and tape recorders etc.

Special Correspondent of Economic Times² (1985) reported that Assam Industrial Estates were in disorder and facing a number of problems, viz., lack of trained entrepreneurship, low potential of industrial activities, higher cost of production and difficulties of procuring raw materials.

R. Narayan³ (1985) remarked in his paper that Industrial Estates in Bihar were facing a number of problems such as poor infrastructural facilities, bad shape roads, inadequate supply of water, short supply of raw materials and power, because of these problems large number of units have

-
1. Sharma Tyagaraj, "Mayapuri and Naraina Humming with Activity", Economic Times, July 3, 1985, pp. 1-6.
 2. Srinivasan, K.M.; "Industrial Estates in Tamil Nadu", Economic Times, September 23, 1980, pp. 1-4.
 3. Economic Times Special Correspondent, "Assam Industrial Estate in a mess", Economic Times, September 20, 1985, p.5.

been either closed or are at the stage of closure. To overcome these problems, the state government has set up the following organisations:

1. Industrial Area Development Authorities to deal the problem of sick unit.
2. Public Health Engineering Department (PHED) to deals with water supply in the rural areas.

Jairam Krishnan¹ (1985) has studied "Effluent disposal problems in the Gujarat Industrial Estates" and observed that Gujarat Industrial Estates has set up an underground disposal channel, underground power and drainage supply, pollution free atmosphere and proper outlet for the industrial wastes.

S.M. Jaffar² (1985) reviewed performance and problems of Industrial Estate in Uttar Pradesh during plan periods. He identified that the allotment of plots were faulty and facing so many problems, such as higher sales tax rates, toll barriers, Erratic power supply, poor telephone network, and lack of needed facilities.

P.N.Sharma³ (1985) pointed out that Government of Himachal Pradesh offered a number of incentives and

-
1. Narayan R; "Poor Infrastructure in Bihar", Economic Times, July 18, 1985, pp. 1-4.
 2. Jaffar, S.M.; "Allotment of plots faulty in U.P.", Economic Times, July 8, 1985, pp. 1-4.
 3. Sharma, P.N.; "Himachal Pradesh a heaven for investors", Economic Times, July 13, 1985, pp. 1-4.

subsidies such as, low sale tax, low subsidy for the power consuming industries, subsidy on capital cost, subsidy on freight, subsidy on rate of interest, exemption of income tax, uninterrupted power supply for the investors to established units in Industrial Estates.

Jairam Krishnan¹ (1985) in his studies entitled "Effluent disposal problem in the Gujarat Industries Estate" observed that, Gujarat Industrial Estates set up an underground effluent disposal channel, underground power and drainage supply, pollution free atmosphere and proper outlet for the industrial wastes.

M.C. Dandia² (1985) in an article entitled "Industrial Estate, Haphazard growth in Rajasthan" highlighted the progress and development of Industrial Estate in Rajasthan. He observed that the development of Industrial Estates in Rajasthan is haphazard and is facing number of difficulties, such as, high sale price of the plots, transport facilities, housing facilities, municipal facilities, daily scavenging, telephone, telex and postal facilities, erratic power supply etc. He further said that attitude of Rajasthan State Industrial Development and

1. Krishan Jairam, "Effluent disposal problem in Gujarat", Economic Times, July 21, 1985, pp. 4-8.

2. Dandia, M.C. ; "Industrial Estate, Haphazard Growth in Rajasthan", Economic Times, July 15, 1985, pp. 1-8.

Investment Corporation (RIICO) are providing the infrastructure facilities and plan to follow in future the policy of development of integrated areas.

L.S. Herdania¹ (1985) in his article made observation that Madhya Pradesh is a good location for prospective entrepreneurs, but there are a lot of lapses in the enforcement of policy decision, which slow down speed of development. An agency 'Industrial Development Corporation' solve all the problems faced by new industrialist, who set up industries in the Industrial Estates and Areas and could act as a coordinator between the various departments of government.

Nitya Chakraworthy² (1985) reviewed that Guwahati Industrial Estates faced the number of probelms i.e. absence of adequate infrastructural facilities and skilled management, charging high cost of power than the other departments, shortage of power supply, normal sanitation and drainage facilities, bad shape of roads, shortage of raw materials and shortage of finance.

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1. Hardenia, L.S.; "Regional Corporations can spur growth", Economics Times, July, 1985, pp. 1-4.
 2. Chakravorthy, Nitya, "Guwahati Lacks Infrastructure", Economic Times, July 20, 1985, pp. 1-4.

O.N. Kaul¹ (1985) viewed that Jammu Industrial Estates is the second largest Estates in Northern India after OKHLA in New Delhi, it is connected with rest of the country by rail, choice of the units has been motivated by the short term interest, adequate power supply was assured, quotas of different raw materials regularly allotted by the centre.

Pradeep Puri² (1985) observed that erratic power supply is a cause of distruction of Industrial Area at Najafgarh, besides these, limited infrastructure facilities, low voltage of power, frequents trippings, shortage of water supply, difficulties in movement of traffic, due to the rainy water, teleprinter and telex facilities are not good.

Anand Vardhan³ (1985) investigated that OKHLA is successful symbol of small units, such as, ideal environment for developing small scale industries, remarkable understanding among the entrepreneurs, chalkingout planned development programme, creation of infrastructure and other basic requirements, trouble free manufacturing environment and proximity to the market.

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1. Kaul, O.N. "Jammu is Second Largest", Economic Times, July 7, 1985, p.1.
 2. Puri Pradeep, "Power shortage plays havoc at Najafgarh", Economic Times, July 4, 1985, pp. 1-5.
 3. Vardhan Anand, "Okhla, symbol of small units success", Economic Times, July 1, 1985, pp. 1-4.

Rahul Kumar¹ (1985) critically studied the problems of Wazipur Industrial Estates is a ~~A~~midst horrid squalor, choked drains, ugly "Juggi jhompris" and lacks of basic amenities, such as problems of roads, street lights and drainage problems of sanitation.

Surrinder Kullar² (1985) assessed that Punjab Industrial Estates has been lacking units of planned growth, such as lack of infrastructure facilities, incentive delayed incentive denied, always crippling delay in the disbursal of these incentives, industrial growth come to halt due to neglect and inclement political climate in the state.

H.K. Rao³ (1985) found in his study that government promised to develop certain things in Kandivli, such as "green belt" around the Estate, a fire station, a police out post, a post office, a telephone exchange, a common facilities centre, ware house, bank premises, administrative block, a welfare centre, a recreation centre and ESIS dispensary, a liabrary, a technical training centre for

1. Kumar Rahul, "Wazirpur, Slums with 360 Cr. turnover", Economic Times, July 12, 1985, pp. 1-4.

2. Kullar Surrinder, "Punjab units lacks planned growth", Economic Times, July 19, 1985, p.1.

3. Rao, H.K.; "Primises broken at Kandivli", Economic Times, July 12, 1985, pp. 1-4.

workers, a canteen, open lawn and a bus terminal at the charkop Industrial Estate.

N.Gangadhara Rao's¹ (1986) study aimed in evaluating the impact of the programme of Industrial Estates on the emergence of entrepreneurship and growth of small units in coastal Andhra. According to him, educational and income levels are important factors in motivating entrepreneurship. Of all, money making is the major ambition of entrepreneurs.

Manju Ghodke² (1987) examined critically the Industrial Estates in Maharashtra and felt that atmosphere in this state was conducive to growth of more industry even in far flung areas, it could serves as a major tool for industrial dispersal.

Z.U. Khairoowala³ (1987) made an humble attempt to study the concept of entrepreneur and entrepreneurship, factor contributing to entrepreneurial growth, role of Government organisations and financial institutions in the development of entrepreneurship.

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1. Rao Gangadhara, N.; "Entrepreneurship and growth of Enterprise, in Industrial Estates", Deep and Deep Publications, New Delhi, 1986.
 2. Ghodke, M.; "Maharashtra Industrial Estates", Economic Times, May, 1987, p. 29.
 3. Khairoowala, Z.U.; "Entrepreneurial development, its concept and growth", Maheen & Maheen Publication, Madras, 1987.

Y.P. Datta¹ (13 July 1993) reported that Japanese choose Noida for Industrial Model Town (IMT) which has complete industrial infrastructure for attracting foreign direct investment (FDI).

SCOPE OF THE STUDY:

Keeping in view the above noted review of literature, it was felt necessary to make a micro study of the Role of Industrial Estates in the promotion of Aligarh district. This study is first of its kind in nature which provides factual informations about the development of Industrial Estates of Aligarh as well as different states of India.

OBJECTIVE OF THE STUDY:

The objective of the study are as follows:

1. To study the concept and objectives of Industrial Estate.
2. To review the development of Industrial Estates in India during the plan periods;
3. To evaluate the performance and problems of Industrial Estates of all the states of India.
4. To review the growth and development of Industries in Aligarh district.

1. Datt, Y.P.; "Japanese choose Noida for Industrial Model Town", Economic Times, July 13, 1993, p.20.

5. To evaluate the growth and development of Industrial Estate of Aligarh district.
6. To examine the Role of Industrial Estate in the development of Aligarh district.
7. To identify the problems and suggest suitable measures for the development of Industrial Estate in Aligarh district.

METHODOLOGY:

The study is based on secondary data. The sources of the secondary data include the Industrial Directory and Udogic Marg Darshika of District Industry Centre, Aligarh, Economic and Statistical Bulletin of Economic and Statistical department, State Planning Institute, Aligarh Five Year Plans and other reports, Magazines Yojana, Economic and Political Weekly, Economic Times, Financial Express and Times^s of India etc. have also been consulted.

Apart from this, to achieve the above mentioned objectives an extensive use of the facilities available in the following libraries and organisations have been made:

1. Maulana Azad Library, AMU, Aligarh.
2. Seminar Library, Department of Commerce, AMU, Aligarh.
3. Library of Coaching and Guidance Centre, AMU, Aligarh.
4. Library of General Education Centre, AMU, Aligarh.
5. District Industry Centre, Aligarh.

6. Economic and Statistical Department State Planning Institute, Aligarh.
7. Department of Tala Nagri, Ramghat Road, Aligarh, and
8. U.P. Electricity Department, Industrial Estates, Aligarh.

SCHEME OF CHAPTERISATION:

The entire study has been divided into eight chapters:

The first chapter deals with the review of literature, scope of the study, objective of the study etc. The second chapter has been devoted to review the concepts and objectives of Industrial Estate. Growth and Development of Industrial Estates in India during plan periods has been discussed in the third chapter. The fourth chapter has been devoted to evaluate the performance and problems of Industrial Estate of all the states of India. The fifth chapter deals with the growth and development of Industries in Aligarh district. The sixth chapter has been devoted to evaluate the growth and development of Industrial Estates in Aligarh district. In the seventh chapter, Role of Industrial Estates in the development of Aligarh district has been examined. The last chapter deals with the conclusions and suggestions.

CHAPTER - 2

CHAPTER - II

INDUSTRIAL ESTATE — A CONCEPTUAL APPROACH

The concept of Industrial Estates has been defined differently by different economists. In the dictionary of Michael J. Wallace and Patrick J. Flynn the term Industrial Estate has been defined as. "an area in or around a city which has been set aside especially for offices and factories usually sponsored by the Government, and usually the space is given for a low rent."¹

William Bredo has defined the concept of Industrial Estate as "a tract of land which is sub-divided and developed according to a comprehensive plan for the use of a community of industrial enterprises. The plan must make a detail provision for streets and roads, transportation facilities, installation of utilities, and the erection of factory buildings."²

In the opinion of P.C. Alexander, an Industrial Estate is "a group of factories constructed on an economic scale in suitable sizes with facilities of water, transport,

1. Michael J. Wallace and Patrick J. Flynn, "Dictionary of Business English", Rupa Co. 15 Bankin Chatterjee, Allahabad, 1988.

2. William Bredo, "Industrial Estates: Tools for Industrialisation", Asia Publishing House, Bombay, 1962, p. 1.

electricity, steam, bank, post office, canteen, watch and ward and first-aid provided with special arrangement for technical guidance and common service facilities. The Estate combines in itself some of the important scheme of assistance to small industries and provides a total outlay for integrated development."¹

He further defines that Industrial Estates is "a planned cluster of industrial enterprises offering standard factory building erected in advance of demand, and variety of service and facilities to the occupants."²

According to Rosenstein-Roxdan "an Industrial Estate is a developed tract of land on which, built up premises are made available by a sponsoring agency and vacant land is not sold to entrepreneurs for their own building activity. An Industrial Area, on the other hand, is a large developed tract of land, which is parcelled and sold or leased out to needy small entrepreneurs so that they build their own factory buildings."³

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1. Alexander, P.C.; "Industrial Estates in India", Asia Publishing House, Bombay, 1963, p. 5.
 2. Alexander, P.C.; "The objective of Industrial Estates", small industry extension training institute, Hyderabad, p. 10.
 3. Ibid, p. 11.

Thus, it can be said that Industrial Estates besides establishing Small Scale Units, also facilitates organisation of common services, like common arrangements for transport, purchase of raw material, publicity for sale of finished goods. It also helps the promotion of spirit of co-operation and joint effort on the part of small entrepreneurs and gives them collective strength in making representatives and demands for the common goods. To those responsible for the administration of the development schemes for small scale industries, the Estate provides excellent opportunities for controlled observation and experiments for further development.

OBJECTIVES OF INDUSTRIAL ESTATES IN INDIA

The main objectives of the Industrial Estates programme, to start with, was to provide factory accommodation to small industries at suitable sites with facilities of water, electricity, transport, steam, communications, bank, post office, raw materials depots, canteen, watch & ward, first aid, etc., and thereby create the necessary atmosphere for development of Small Scale Industries. These Estates also help in shifting industries from congested areas to conforming areas. It was soon realised that the programme of Industrial Estate could be an effective method for fostering industrial development on a decentralised

pattern and for establishing industries in rural and backward areas.

The main objectives of the Industrial Estates programmes are:

1. to promote development of Small Scale Industries;
2. to shift small industries from congested areas to conforming areas;
3. to encourage growth of ancillary industries; and
4. to bring about stimulation of industrialization in economically backward and rural areas.

OBJECTIVES OF INDUSTRIAL ESTATES ABROAD

The objectives of Industrial Estates differed from country to country and from time to time. It is, therefore, necessary to highlight the objectives of the Industrial Estates programme in other countries, such as, Britain, U.S.A., Canada, Puerto Rico, Northern Ireland, Pakistan, Hong Kong, Italy, Argentina, Brazil, Korea, Kenya, Tanzania, Uganda, Sri Lanka, Nepal and United Arab Republic.

BRITAIN:

In Britain the programme of Industrial Estate has been introduced by the Government for the development of 'depressed areas' or 'weaker areas' which have been specially demarcated by statute. The concessions and

facilities under the Industrial Estates programme are however being availed of by even some of the most advanced industrial concerned who have established their branches in such areas. These Estates are called Trading States.¹

THE UNITED STATES:

In America, the concept of Industrial Estates is a bit different from other countries. Here the Industrial Estate is known by the name of the Industrial park. Industrial park is a tract of land development and is subdivided according to a comprehensive plan for the use a community of industries.

The objective of the Industrial park in the U.S.A. is not development of Small Scale Industries as in India or development of depressed areas as in the U.K. The approach in the U.S.A. is mainly one of area planning and the main objective is to provide factory accommodation to industries.²

CANADA:

In Canada the approach to Industrial Estates is described as one of 'area planning-cum-industrial

1. Alexander, P.C.; "Industrial Estate in India", Asia Publishing House, Bombay, 1963, p.9.

2. Ibid, p. 11.

development'. They are also called 'Industrial Plaza', Industial Estates in Canada provide factory accommodation only on rental basis and also undertake the construction of buildings for new enterprises, according to their requirements¹.

PUERTO RICO:

Puerto Rico is one of the developing countries where the Industrial Estate scheme has demonstrated its great effectiveness as a tool for rapid industrial development. Under a scheme known as "Operation Bootstrap" several incentives were offered from 1950 onwards to industries from outside, mainly from United States, to set up branch units or new enterprises. Suitable areas have been zoned for industrial development and Industrial Estates or "Industrial subdivision" have been located in such zones offering full facilities to prospective entrepreneurs.²

NORTHERN IRELAND:

The objective of Industrial Estates in Northern Ireland may also be said to be the same as that of Puerto Rico, viz., attracting industries from outside. The problems

1. Alexander P.C.; "Industrial Estate in India", Asia Publishing House, Bombay, 1963, p. 12.

2. Ibid, p. 13.

of Northern Ireland are the same as those of the depressed areas of Britain and for purposes of providing inducements and facilities the whole of Northern Ireland is treated as a development area. A special feature of the Industrial Estate programme in Northern Ireland is that in many places the 'Estate' is only a single factory building. The main objective being attracting any industry that will help the development of the area concerned.¹

PAKISTAN:

In Pakistan, Industrial Estates fall into two categories:

- (i) Industrial Areas for large industries; and
- (ii) Industrial Estates for small industries.

The main objective of the Industrial Estates scheme in Pakistan is therefore to help the development of Industries both large and small. The Industrial Estate, scheme is specifically introduced as measure of assistance to small industries.²

HONG KONG

The Industrial Estate scheme in Hong Kong has some very interesting special features and objectives

1. Alexander, P.C.; "Industrial Estate in India", Asia Publishing House, Bombay, 1963, p. 13.

2. Ibid, p. 14.

necessitated by the special problems of this small colony. The Government has introduced two types of Industrial Estates to meet the situation:

- (i) scheme of flated factories for the resettlement of industrialist; and
- (ii) allotment of developed plots in reclaimed areas.

Under the sheme of flated factories, the Government has built up a number of five story factory buildings sub-divided into flats. The objective of this scheme is strictly the rehabilitation of displaced small industrialist.¹

Attraction of foreign capital, technical know-how and entrepreneurship were the targets of the Costa Rica, Puerto Rica, Trinidad and Tobaggo, Trish Republic and Malta. Argentina intended to achieve, interalia, economies in public financing through a concentration of infrastructural works.² Brazil tried to attract the industry to resource areas and regions.³ Some countries set up Industrial Estates so as to provide necessary facilities for the development of specific industries, as for example, an

1. Alexander, P.C.; "Industrial Estate in India", Asia Publishing House, Bombay, 1963, p. 15.

2. O.P. Mathur, "Manual on Industrial Estates Planning" SIET, Hyderabad, 1971, p.2.

3. Ibid, p. 4.

Estate was planned in Korea for light export industries.¹ Encouraging indigenous participation in the industrialisation of the country through Industrial Estate was the main objective in Kenya, Tanzania and Uganda².

DIFFERENT CATEGORIES OF INDUSTRIAL ESTATES

Industrial Estates can broadly be divided into two parts, one is on the basis of location viz., urban, semi-urban and rural and other one on the basis of nature of the activities.

URBAN INDUSTRIAL ESTATES:

Urban Industrial Estates have come up in many cities and states of India. These Estates are offering the following facilities to the entrepreneurs for the establishment of industrial unit in the country:

1. allotment of sheds on concessional term;
2. loans on soft terms;
3. supplies of utilities on concessional basis;
4. easy and priority allocation of raw materials; and
5. marketing assistance.

1. O.P. Mathur, "Manual on Industrial Estates Planning", SIET, Hyderabad, 1971, p. 4.

2. Ibid, p. 4.

It is proposed that on the pattern of urban Estates, rural Industrial Estates should also be set up in the country¹.

SEMI-URBAN ESTATES:

Semi-urban Estates are those which are located in small towns having a population of 5,000 to 50,000.

RURAL INDUSTRIAL ESTATES:

Rural Industrial Estates are those which are located in villages with a population of less than 5,000².

AIMS AND OBJECTIVES OF RURAL INDUSTRIAL ESTATES:

A sound programme of rural Industrial Estates should aim at:

1. increasing efficiency and production of the village artisans;
2. developing new skills and entrepreneurial abilities;
3. adherence to area and commodity approach;
4. utilising locally produced agro-products and waste products; and

1. Yojana, June 15, 1991, p. 25.

2. Development Commission of Small Scale Industries, Ministries of Industrial Development & Company Affairs, Govt. of India, New Delhi, p. 84.

5. local people, young boys and girls are to be trained to own and run the rural Industrial Estates.

TYPES OF INDUSTRIAL ESTATES:

1. CONVENTIONAL INDUSTRIAL ESTATES:

In the conventional Industrial Estates, factory accommodation is made available to a wide range of small scale industrialists, though in actual practice, it has generally led to the encouraging of light engineering industries in these conventional Industrial Estates.¹ Guindy Industrial Estates in Madras is a conventional Industrial Estate.²

2. ANCILLARY INDUSTRIAL ESTATES:

As the name itself suggests these Estates house units which cater to the needs of large or medium scale industries. Factory sheds in these Estates are allotted to entrepreneurs which serve as an ancillary unit to a large or medium scale industry in that area or region. Such Industrial Estates have been set up at Thiruverambar in Tamil Nadu to serve the requirements of Bharat Heavy Electrical Ltd. (BHEL). Another ancillary Industrial Estate

1. K.N. Srinivasan, "Tamil Nadu Industrial Estates", Economic Times, September 23, 1980, pp. 1-4.

2. S.A. Shahul Hameed, "A Study of Industrial Estate with Special Reference to Madras", M.Phil dissertation in Madras University, 1986.

was set up by State Industrial Development Corporate (SIDCO) after its formation to serve the needs of the cycle industry-T.I. Cycle of India Limited¹. Another good example of an ancillary Industrial Estate is the one set up by the Hindustan Machines Tools Ltd. (HMT) at Bangalore. The HMT selects the entrepreneurs taking into account their special qualifications and back ground. Some of them have been working in the parent company. Another Industrial Estate of this type is being organised by Heavy Electrical India Ltd., Bhopal. The small units in this Estate manufacture items like nuts and bolts, springs, copper conductors and packing cases etc.

3. PRIVATE INDUSTRIAL ESTATE:

The private Industrial Estates are more or less akin to cooperative Industrial Estates, the difference being only in the constitution of the Agency implementing the scheme. In the case of the private Industrial Estate, a company with prospective entrepreneurs as share holders is registered under the Companies Act as against the registration of the cooperative Industrial Estates Acts. Two private Industrial Estates have been established in Tamil Nadu, one at Tieuvottiyur (K.R. Sundaram Industrial Estate) and the other at Coimbatore.

1. K.N. Srinivasan, "Tamil Nadu Industrial Estates", Economic Times, September 23, 1980, p. 4.

4. COOPERATIVE INDUSTRIAL ESTATES:

In these types of Estates, the members of the cooperative society, who are prospective entrepreneurs contribute shares and take steps to set up Industrial Estate of their own, after duly registering their society under the Cooperative Societies Act. Generally, 20 per cent of the capital outlay has to be contributed by the members and the balance of 80 per cent capital required for implementing the scheme for setting up Industrial Estate is obtained from State Government (20 percent) and LIC of India (60 percent) or other such financing institutions as long term loan to be repaid within a period not exceeding 15 years. Cooperative Industrial Estates have been established in Tamil Nadu in places like Salem, Sivakast, Tuticorin, Vysarpadi and Pollachi.¹

5. FUNCTIONAL INDUSTRIAL ESTATES:

This term applies to an Industrial Estate organised for a particular industry as opposed to an ordinary Industrial Estate which provides accommodation to a wide variety and range of small manufacturing concerned. For example, 'Functional' Industrial Estates can be organised for radios, bicycles, sewing machines, moped etc. At

1. K.N. Srinivasan, "Industrial Estate in Tamil Nadu", Economic Times, September 23, 1980, p. 4.

present, there are several small units engaged in the manufacture of component and parts of items like these and some are engaged in assembly and finishing also. There will be a definite advantages in bringing together the manufacturer of parts and components for a particular industry in one Estate which may also have one central assembling and finishing unit. An arrangement like this will help considerably in ensuring standardisation and quality in production. It will have some of the economics of a large scale production unit if proper care is taken in organising the different programmes.

Not much progress has been made on this line so far but to draw a lesson about the working of Functional Industrial Estate, a good example of Government of Tamil Nadu can be quoted. The Government of Tamil Nadu has set up different Functional Industrial Estates in different parts of the state, such as Functional Industrial Estate for leather industry at Madhavaram, for ceramic industry at Virudhachalam, for Electrical and Electronic goods industry at Adyar, Kakkalur and Hosur each.

Functional Industrial Estates are being set up for automobile ancillaries, light machine tools, components and parts, clocks, time piece, watches. A Functional Estate for

electronic components has been started at Pimpri in Poona. A Functional Estate for agricultural implements has been set up at Nagpur. Industrial Estates for leather and ceramic goods are working at Madras. A sports goods Functional Estate has been set up at Delhi and an Estate rubber goods is started in Kerala.

CONCLUSION:

From the above noted facts, it can be concluded that Industrial Estate/Area is a developed tract of land which is not sold to entrepreneurs for their own building activity. An Industrial Area, is a large developed tract of land, which is leased out to entrepreneurs for their own factory building. The main objectives of the Industrial Estates Programme are to promote development of small scale industries, to shift small industries from congested areas to conforming areas and to bring about industrialisation in economically backward and rural areas.

Among the different types of Estates the Conventional Industrial Estates, Ancillary Industrial Estates and functional Industrial Estates are very successful and are established only in big cities of India, while private Industrial Estates and Cooperative Industrial Estates are established in small cities and towns of India.

After discussing the concepts and objectives of Industrial Estates it has been of paramount importance to study the growth and development of Industrial Estates in India during plan periods. Hence, the next chapter has been devoted to deal with the same.

CHAPTER - 3

CHAPTER - III

GROWTH AND DEVELOPMENT OF INDUSTRIAL ESTATE IN INDIA **DURING PLAN PERIODS - AN OVERVIEW**

Jawaharlal Nehru, the architect of planning in India, set up a National Planning Committee in 1938. The Committee considered all aspects of planning and produced a series of studies on different subjects concerned with the economic development of the country. The committee laid down that the state should own or control all key industries and services, mineral resources, Railways, Airways, Shipping, the other public utility concerns and Large Scale Industries.¹

FIRST FIVE YEAR PLAN (1951-1956):

The programme of Industrial Estates as a measure for the development of Small Scale Industries in India was first adopted by Small Scale Industries Board at its meeting held in January, 1955.

In the First Five Year Plan, ten Industrial Estates were planned to be set up by the State Government in Kerala, Tamil Nadu, Uttar Pradesh and West Bengal. The places considered for establishing Industrial Estates were as

1. Datt Ruddar and Sundharam, KPM; "Indian Economy", Sultan Chand and Company Ltd., 1990, p. 108.

Guindy and Virudhunagar in Tamil Nadu, Kanpur and Agra in Uttar Pradesh; Kalyani in West Bengal, Palghat, Trivendrum, Kottayam, Quilon and Trichur in Kerala. In the case of the Industrial Estates sanctioned for Kerala, were located at Olavakodu (Palghat), Pappanam Kodu (Trivendrum) Ettumanur (Kottayam) and Kollakadavu (Quilon). A loan of Rs. 57.89 lakhs and a grant of Rs. 0.49 lakhs were sanctioned to the State Governments by the Central Government towards initial expenditure on these Estates. In addition, construction of two Estates, one at Okhla in Delhi and other one at Naini in Allahabad were undertaken by the National Small Industries Corporation to be established as a private limited company by the Central Government. The construction and management of the Industrial Estates at Okhla and Naini were entrusted to the corporation only as an interim arrangement. The Okhla Industrial Estate has since been transferred to the Delhi Administration.

SECOND FIVE YEAR PLAN (1956-61):

In the Second Five Year Plan (1956-61), 110 Industrial Estates were sanctioned to be set up in different states of the country. The plan provision for small scale industries increased from Rs. 5 crore in the First Plan to Rs. 55.57 crore in the Second plan, of which Rs. 10.98 crore were earmarked for Industrial Estates. Two types of

Industrial Estates i.e. large ones costing Rs. 40 to 50 lakhs and small ones costing Rs. 20 to 25 lakhs were established. The Central Government announced that the construction and management of Industrial Estates will be given to State Governments at their agencies. The National Small Industries Corporation had undertaken the construction work of Okhla Industrial Estate and Naini Industrial Estate. By the end of 1961 fifty three (53) Estates were functioning, fourteen (14) Estates were completed but had not started functioning, twenty four (24) Estates were under construction and twenty eight (28) Estates were in preliminary stage i.e. acquisition of land, preparation of estimates, etc. The progress of Industrial Estates in terms of factory sheds was as follows:

1. Number of sheds completed	2077
2. Number of sheds allotted	1872
3. Number of sheds occupied	1569
4. Number of sheds functioning	1049

A complete report of all the units functioning in the Industrial Estates has not yet been compiled. From reports received from 790 units, it was found that they were employing about 13400 workers and producing goods worth Rs. 14 crores.¹

1. Alexander, P.C.; "Industrial Estate in India" Asia Publishing House, 1963, pp. 17-20.

BREAK-UP OUTLAY DURING SECOND FIVE YEAR PLAN:

The following table shows the break-up of total outlay during Second Five Year Plan (1956-61).

Table No. 3.1

BREAK-UP OF TOTAL OUTLAY DURING SECOND FIVE YEAR PLAN
(1956-61)

(Rs. in crores)

Industry	Indus- trial Esta- tes	Small Scale Indu- stry	Hand- loom Indu- stry	Power loom Indus- try	Khadi & village Indus- try	Seri- cul- ture	Coir Indu- stry	Handi- craft	Total
II Plan Estimated Expen- diture (1956-61)	11.6	44.4	29.7	2.0	82.4	3.1	2.0	4.8	180.0

Source: Third Five Year Plan, Government of India Planning Commission, p. 438.

The above noted table shows that total estimated expenditure in the Second Five Year Plan was Rs. 180 crore of that 82.4 crore was for the development industries, 44.4 crore was for the development of Small Scale Industries, Rs. 29.7 crore was allotted for the development of Handloom Industries and Rs. 11.6 crore was allotted for the development of Industrial Estates in India. It shows that in

this plan a very small amount of money was invested for the development of Industrial Estates.

THIRD FIVE YEAR PLAN (1961-1966):

The promotion of industries in rural areas and small towns was one of the important objectives of the Third Five Year Plan and the scheme of Industrial Estates was regarded as an important agency for ensuring this objective. It was felt that Industrial Estates in rural areas need not necessarily have a large number of factories or factories of large sizes as in industrially advanced areas. Very often the entrepreneurs need small workshops to begin with. It was therefore expected that a large number of workshops, and small Industrial Estates would be set up by the State Governments in rural and backward areas in the Third Five Year Plan Period.¹

The Third Five Year Plan witnessed a great spurt in Industrial Estates programme as the demand all over the country for factory accommodation increased considerably on account of phenomenal development of small scale industries that had taken place by the end of the Second Five Year Plan. Up to the end of Third plan, about 500 Industrial Estates of varying sizes and types had been sponsored in rural areas.²

1. Third Five Year Plan, Planning Commission of India, pp. 431-432.

2. Ibid. pp. 431-432.

TOTAL OUTLAY DURING THE THIRD FIVE YEAR PLAN FOR INDUSTRIAL ESTATES:

The following table reveals the total estimated expenditure of India and total outlays of state and union territory and central government in different sectors.

Table No. 3.2

BREAK-UP OF TOTAL OUTLAYS DURING THIRD FIVE YEAR PLAN

(Rs. in crores)

Industry	III Plan estimated expenditure 1961-66	III Plan outlays		
		State Union Territory	Centre	Total
Industrial Estate	22.15	30.20	-	30.2
Small Scale Industry	86.12	62.60	22.0	84.6
Handloom Industry	25.37	31.00	3.0	34.0
Powerloom Industry	1.52	-	4.0	4.0
Khadi and Village Industry	89.33	3.4	89.0	92.4
Sericulture	4.39	5.5	1.5	7.0
Coir	1.79	2.4	0.8	3.2
Handicraft	5.30	6.1	2.5	8.6
Total	240.75	141.2	122.8	264.0

Source: Fourrth Five Year Plan, Government of India Planning Commission, p. 223.

From table no. 3.2 it can be observed, that the total estimated expenditure was Rs. 240.76 crore of which Rs. 22.15 crore was estimated for Industrial Estates. The total outlays of state government and union territory was Rs. 141.2 crore of which Rs. 30.20 crore was allotted for the Industrial Estates. The Central Government has allotted a total outlay of Rs. 122.8 crore for different industries, but Industrial Estates were completely neglected.

INDUSTRIAL ESTATES DEVELOPMENT IN INDIA DURING THIRD FIVE YEAR PLAN:

The following table shows the picture of number of Industrial Estates, provided sheds, occupied sheds, employment and production during the Third Five Year Plan Period.

Table No. 3.3

DEVELOPMENT OF INDUSTRIAL ESTATES IN INDIA AT THE END OF THIRD FIVE YEAR PLAN

(Rs. in crores)						
Period	No. of Industrial Estates	Provided sheds	Occupied sheds	No. of employment	Annual production	Registered cooperative Industrial Estate
End of Third Plan	346	8670	6600	82700	99.25	125

Source: Fourth Five Year Plan, Published by Planning Commission of India, pp. 284-285.

Table No. 3.3 reveals that about 346 Industrial Estates were completed by the end of the March 1969 as compared to 66 Estates in 1960-61. There were 8670 sheds of which 6600 sheds were occupied. The small units set up in these Estates provided employment to about 82700 persons and produced the goods amounting to Rs. 99.29 crores. During the same period 125 cooperative societies were registered for the establishment of cooperative Industrial Estate.

FOURTH FIVE YEAR PLAN (1969-1974):

The major emphasis during the Fourth Five Year Plan was on the consolidation of Industrial Estates programme. An expenditure of Rs. 15.73 crore was estimated for the development of Industrial Estates in the country. By the end of the Fourth Five Year Plan 612 Industrial Estates had been sponsored.

TOTAL OUTLAY OF VARIOUS INDUSTRIES IN FOURTH FIVE YEAR PLAN:

Table No. 3.4 indicates the total outlay of various industries including Industrial Estates during Fourth Five Year Plan.

Table No. 3.4TOTAL OUTLAY FOR THE FOURTH FIVE YEAR PLAN (1961-74)

(Rs. in crores)

Industry	Centre	Centrally sponsored	State and Union Territories	Total
Industrial Estates	-	-	18.15	18.15
Small Scale Industries	34.00	-	67.74	101.74
Handloom Industry	4.50	-	28.67	42.98
Powerloom			9.81	
Khadi and Village Industries	95.00	-	11.43	96.43
Sericulture	2.00	-	9.37	11.37
Coir Industry	1.50	-	2.92	4.42
Handicrafts	8.00	-	6.52	14.52
Rural Industry Project	-	4.50	-	4.50
Collection of Statistics	-	0.60	-	0.60
Total	145.00	5.10	145.61	295.71

Source: Fourth Five Year Plan, Published by Planning Commission, India, p. 223.

The above noted table reveals the total outlay during Fourth Five Year Plan for village and small industries, including Industrial Estates in Public Sector. From table it is discernible that the Fourth Plan (1969-74) envisaged a total outlay of Rs. 295.71 crore in the public sector for the development of

village and small scale industries. The distribution of the outlay in the country was Rs. 145.00 crore for centre, and a total outlay for the states and union territories was envisaged to be of the order of Rs. 145.61 crore.

PROGRESS OF INDUSTRIAL ESTATES IN INDIA DURING THE FOURTH FIVE YEAR PLAN:

The progress of Industrial Estates during the Fourth Five Year plan can be studied from the following table:

Table No. 3.5

THE PROGRESS OF INDUSTRIAL ESTATES IN INDIA DURING THE FOURTH FIVE YEAR PLAN (1969-1974)

No. of Estates completed	March, 1969	March, 1974
Functioning	285	401
Not Functioning	104	164
<u>No. of sheds</u>		
Constructed	8607	10840
Functioning	5110	7070
Employment	-	23350
Production Annually	-	127 crores

Source: Draft Fifth Five Year Plan 1974-1979, Government of India, Planning Commission, pp. 220-221.

Table No. 3.5 shows that in 1974 production of the units in the Industrial Estates was Rs. 127 crore and these units provided employment to 23350 persons. In 1969 the number of non-functioning sheds were 104 and this has been due to unsuitable location. In 1969 constructed sheds were 8620 out of these 5110 sheds were functioning. In 1974, 401 Estates were functioning and 169 Estates were not in operation. There were 10840 sheds of that 7070 were functioning. In the urban areas a number of schemes were evolved for the establishment of Industrial Areas. The programme of Industrial Estates was consolidated, ordinarily, no new Estates were set up in cities and large towns. However, in exceptional cases where there is an effective demand for them, the states provided developed sites to small entrepreneurs or to cooperative and joint stock companies, on which they could construct their own factory buildings. The programme of setting up of Industrial Estates, complete with factory premises, however, be pursued in small towns and promising rural and backward areas. Selection of sites for industrial development and Industrial Estates was made on the basis of quick techno-economic surveys. The public sector undertakings encouraged to establish Estates for the small ancillary units. The funds allotted for the industrial development areas used for promotion of Small Scale Industries alongwith medium and

large scale industries. Establishment of cooperative Industrial Estates should also be encouraged.

FIFTH FIVE YEAR PLAN (1974-1979):

The Fifth Five Year Plan envisaged an outlay of Rs. 24.97 crore for the Industrial Estates programme, the provision was mainly in the nature of 'seed' capital and 'margin' money for state corporations to enable them to obtain larger inflow of institutional finance for promoting Industrial Estates. Emphasis was also given on setting up of mini Industrial Estates at Panchayat level.¹

It was also proposed to construct flatted factories for craftsmen and small entrepreneurs, to construct Industrial Estates, with factory Buildings in selected 'growth' centre, in semi-urban, rural and backward areas, and to construct technical type factory building to minimise the use of scarce buildings materials and to reduce the level of rent. Industrial cooperative and public sector undertakings established Industrial Estates and develop Industrial Areas.²

1. Fifth Five Year Plan Draft Proposed sectorial programme, Vol. II, p. 162.

2. Draft Fifth Five Year Plan, 1974-79, Government of India Planning Commission, pp. 161, 162, 164 & 167.

INDUSTRIAL ESTATE AND GROWTH CENTRE DURING THE FIFTH FIVE YEAR PLAN:

The following table provides a profile of the number of Industrial Estate and growth centre during the Fifth Five Year Plan.

Table No. 3.6

THE NUMBER OF INDUSTRIAL ESTATES AND GROWTH CENTRE DURING FIFTH FIVE YEAR PLAN (1969-74)

Fifth plan targets	
No. of new Estates/Areas proposed to be set up (alongwith number of sheds)	
(a) Urban areas	-
(b) Semi-urban areas	01 shed - 22 Nos.
(c) Rural areas	01 shed - 08 Nos.
No. of persons likely to be employed in	
(a) Constructional activities	-
(b) Industrial activities	80
(i) Technical	10
(ii) Others	70

Source: Fifth Five Year Plan Draft proposed, sectorial programme volume II, Government of India, pp. 192-193.

The above noted table shows that one Industrial Estate was set up in semi-urban areas with 22 sheds and one

in rural areas with 8 sheds. The number of persons likely to be employed in constructional activities was not available but in Industrial activities 30 persons were employed out of these 10 are in technical line and remaining 70 are in other activities.

SIXTH AND SEVENTH FIVE YEAR PLANS:

Industrial Estates and area programme got special attention in industrially backward areas during Sixth Five Year Plan. More effective measures were provided to induce the entrepreneurs to occupy sheds in the rural and backward areas to make a success of rural industrialisation programme. The Sixth plan provided an outlay of Rs. 616 crore to small scale industries including industrial Estates.¹ In the Seventh Five Year Plan, Industrial Estates did not receive much attention and were almost neglected.

EIGHTH FIVE YEAR PLAN (1992-97):

The growth centre of the Government approach has been acceptable as a suitable measures for industrial dispersal during Eight Five Year Plan establishment. It is proposed to develop Industrial Area for the small industries and to establish functional Industrial Estates at suitable

1. Sixth Five Year Plan, Government of India Planning Commission, p. 321.

locations in areas with substantial agriculture, vegetable and horticulture produce. Besides, the growth centre integrated infrastructure development cultures for tiny units in rural and backward areas would be set up involving the centre, state government and industry association.¹

CONCLUSION:

From the foregoing noted facts, it can be concluded that the growth and development of Industrial Estate during the First Five Year Plan, Fifth Five Year Plan, Sixth Five Year Plan and Eighth Five Year Plan was not satisfactory. But in Second Five Year Plan. Third Five Year Plan and Fourth Five Year Plan the progress of Industrial Estates was very satisfactory. Thus, it can be said that the Government should make an all out effort to galvanise the progress of these Estates by making adequate provision and facilities for entrepreneurs.

In the foregoing pages growth and development of Industrial Estate of India during plan periods has been discussed. To make the study more meaningful and result oriented the succeeding chapter has been devoted to evaluate the performance and problems of Industrial Estates of different states of India.

1. Eight Five Year Plan (1992-97) Vol. II, sectorial programme and development, Government of India Planning Commission, New Delhi, p. 134.

CHAPTER - 4

CHAPTER IV

STATEWISE PERFORMANCE AND PROBLEMS OF INDUSTRIAL ESTATES IN INDIA - AN ANALYTICAL REVIEW

The present chapter entitled "Statewise Performance and Problems of Industrial Estates in India", gives a detailed account of progress, development and problems of Industrial Estates statewise and Union Territorywise in India.

India is the seventh largest and second most populous nation of the world. It lies in the northern hemisphere as the mainland of India which extends between latitudes $8^{\circ}4'$ north and $37^{\circ}6'$ north and longitude $68^{\circ}7'$ east and $97^{\circ}25'$ east. In terms of the size of population, India is the second largest country in the world, next only to China. India's population constitutes nearly 15 percent of the total world population while her geographical area is only 2.4 per cent of the world.

India is a union of 25 federative states, and 7 centrally administered Union Territories. The 25 states are: Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan,

Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. The seven Union Territories are: Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Delhi, Daman and Diue, Lakshadweep and Pondicherry¹.

In the succeeding paragraphs and analysis of the growth and development of Industrial Estates-statewise and Union Territory-wise is made.

INDUSTRIAL ESTATE IN ARUNACHAL PRADESH:

Industrial Estate in Arunachal Pradesh have been established at Itanagar, Naharlagun, Pasighat, and Deomali Arunachal Pradesh Industrial Development and Financial Corporation Ltd. (APIDFC); Itanagar came into existence in 1978 with an objective to provide subsidies and Industrial Loans to Small Scale and Medium Scale Industries in Arunachal Pradesh².

INDUSTRIAL ESTATES IN ASSAM:

Assam had nine Industrial Estates till 1985, which were situated at Guwahati, Nalbariu, Dhekiajuli, Baclarpurghat, Jorhat, Sibsagar, Tinsukia, Nowgong, and new

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1. Competition Success Review, "General Knowledge at a glance", Competition Review (P) Ltd., New Delhi, 1990-91, pp. 7-14.
 2. India 1990, Publication Division, Ministry of Information and Broadcasting, of India, p.760.

Bongaigoan. They produced the goods worth Rs. 6.4 crore annually providing employment to 2,000 persons. There were 229 sheds occupied by 94 Industrial Units. At least 40 per cent of these units were facing lot of difficulties in maintaining their existence¹.

Out of these Estates, Guwahati Estate is the oldest one which was established in 1956². This Estate had 61 sheds and 41 units employing about 1,200 workers, including those engaged on contract basis³. These units were producing goods worth Rs. 4 crore annually. Guwahati Estate alone accounted for about two third of the total production of all the Industrial Estates in the state. In terms of production value-wise Guwahati is followed by Nalbari and Nowgong⁴.

In 1985 Nalbari had 15 sheds out of that 11 sheds were occupied by their Industrial Units producing the goods worth Rs. 60 lakhs and employing about 200 workers⁵.

1. Special correspondent of Economic Times, "Assam Industrial Estates in a mess", Economic Times, September 20, 1985, p.4.

2. Ibid, p.4.

3. Nitya Chakravorthy, "Guwahati Lacks Infrastructures", Economic Times, July 20, 1985, pp. 1-4.

4. Special Correspondent Economic Times, "Assam Industrial Estates in a mess", Economic Times, September 20, 1985, p.4.

5. Ibid, p.4.

Similarly Nowgong had four units till 1985 occupying all the sheds producing goods worth Rs. 60 lakhs per annum¹. Some of the Industrial Estates were just limping. One such is at Dhekiajuli, established in 1958, had 23 sheds occupied by five Industrial Units in 1985. These units produced goods worth Rs. 10 lakhs every year and therefore their growth prospects are very bleak².

The Industrial Estate at Badurpurghat was set up in 1966 and till 1985 the Estate had 10 Industrial Units occupying 28 sheds producing goods worth Rs. 10 lakhs, employing 150 persons³. Some of the units were quite viable with good prospects for growth, but financing for expansion was a big problem. In Jorhat there were 11 units occupying 26 sheds producing goods worth Rs. 250 lakhs annually till 1985⁴.

PROBLEMS OF INDUSTRIAL ESTATES IN ASSAM:

The units in general have complaints against the role of ASIDC and the banks. They have pointed out that both ASIDC and the banks have not cooperated with them in overcoming their problems and in the case of a large number of units the lack of finance in proper time has adversely affected their economic viability⁵.

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1. Special Correspondent Economic Times, "Assam Industrial Estate in a mass", Economic Times, September 20, 1985, p.4.
 2. Ibid, p-4.
 3. Ibid, p-4.
 4. Ibid, p-4.
 5. Ibid, p-4-

The banks have pointed out that they are always ready to finance sick units, but the problems lie with the struggling units because they do not try to comply with their queries and specifications. The State Bank has started a nursing programme for restoring the health of ailing units.

The Industrial Estates are also suffering from inadequate infrastructure facilities. Even though the Planning Commission had approved Rs. 2.60 crore during the Seventh Plan for the development of Industrial Estates in Assam and in 1985-86 Rs. 40 lakhs was sanctioned for the same purpose.¹.

Besides, Assam Industrial Estates are facing the following problems: lack of trained entrepreneurship; low potential of industrial activities, higher cost of production; and problems of procuring raw materials. Therefore, it is an emergent need that the Government should come forward with some remedial measures to overcome these problems.

INDUSTRIAL ESTATE IN BIHAR:

Till 1985 Bihar State had 33 Industrial Estates under its control, Six Industrial Area Development

1. Special Correspondent Economic Times, "Assam Industrial Estate in a mess", September 20, 1985, p.4.

Authorities, 15 Industrial Estates were under the control of Patna Industrial Area Development Authority being the largest number of Estates, 7 Estates were under the control of Darbhanga Industrial Area Development Authority, 5 Estates were in Ranchi, 4 Estates were under the control of North Bihar Industrial Area Development Authority and one each under the control of Adityapur and Bokaro Industrial Area Development Authorities¹.

OBJECTIVES:

Industrial Area Development Authorities were set up to achieve the following major objectives:

1. Identification and selection of site and acquisition of land to set up Industrial Area/Estate.
2. Development of Industrial Area/Estates and providing accommodation in sheds to small and medium industries with all the infrastructure facilities.
3. Allotment of plots and sheds to prospective entrepreneurs.
4. Distribution of raw material to the allottees for construction of buildings and sheds.
5. Providing indigenous scarce raw materials to the units on the basis of assessed requirements.
6. Rendering assistance in obtaining license/release order for imported raw materials components spares etc.

1. R. Narayan, "Poor Infrastructure in Bihar", Economic Times, July 18, 1985, pp. 1-4.

7. Providing technical guidance and assistance to the entrepreneurs in selection of industry, site, machinery supply sources, technical know-how etc. and
8. Providing assistance in obtaining registration from Directorate of Industries and arrange finance through various financial institution¹.

Patna Industrial Area Development Authority came into existence in 1973. At the end of 1984 it had 15 sheds within 121 units. Another 41 units were in different stages of construction. This position however, cannot be described as encouraging.

PROBLEMS OF INDUSTRIAL ESTATES:

The Estates in Bihar are facing the following problems: lack of proper infrastructure facilities; poor shape of roads, inadequate supply of water, short supply of raw materials; erratic power supply, due to poor maintenance of transmission lines, marketing problems, escalation of cost of raw materials, and sewage and drainage problems resulting health hazards.

PROGRESS OF INDUSTRIAL ESTATES IN BIHAR:

The following table shows the number of established units, number of allotted sheds, number of unallotted sheds

1. R. Narayan, "Poor Infrastructure in Bihar", Economic Times, July 18, 1985, pp. 1-4.

and number of organisation staff of Industrial Estates in Bihar.

Table No. 4.1

ACHIEVEMENT OF INDUSTRIAL ESTATES IN BIHAR TILL 1985

Period	No.of Indus- trial Estate	Establi- shment of units	<u>No.of sheds</u> Allo- Unallo- ted ted		Total	Extra hand organi- sation staff
Till 1985	33	400	867	99	966	20000

Source: R. Narayan, "Poor Infrastructure in Bihar", Economic Times, July 18, 1985, pp. 1-4.

The above table reveals that, there were 33 Industrial Estates by the end of 1985 in which 966 sheds were constructed of which 867 sheds were allotted and 99 sheds were unallotted. Out of these, over 400 units had gone into production creating employment to nearly 20000 extra hand.

ROLE OF THE GOVERNMENT IN THE DEVELOPMENT OF INDUSTRIAL ESTATE IN BIHAR.

The Bihar state Government is providing the following facilities to the entrepreneurs in Industrial Estates:

1. The State Government has announced a price preference scheme to help the small scale units.
2. The Government has also offered a number of incentives, but there is much delay in obtaining the concessions. and
3. The State Government has set up Industrial Area Development Authorities to sort out the problems, but these agencies have not achieved much success for two reasons. They were not made entirely responsible for the development of Industrial Estates or Areas. Secondly the authorities have not been provided sufficient funds to meet all their requirements. Therefore, full facilities and sufficient funds should be provided to Industrial Area Development Authorities so that there should be no hindrance in the rapid development of Industrial Estates or Areas.

INDUSTRIAL ESTATE IN GOA:

Till 1990 the Goa state had 12 Industrial Estates with 4,231 small scale units with a total investment of Rs. 60.89 crore. These units generated employment to 27124 persons. There were 41 large and medium scale units with a total investment of Rs. 220.70 crore employing 8838 persons. Besides a new electronic city is coming up in the state¹.

INDUSTRIAL ESTATES IN GUJRAT:

Industrial Estates in Gujrat are basically small sector oriented Gujrat Industrial Development Corporation (GIDCO) has invested over Rs. 197 crore in land and infrastructure for the promotion of Industrial Estates in

1. India 1990, Publication Division, Ministry of Information and Broadcasting, Government of India, p.749.

Gujrat States 80 per cent of the total outlays has been in the Ahmedabad, Bombay Carridor. The investment on the part of GIDCO has been only two per cent, in Mehsana, Rajkot and Bhavnagar between one per cent to two per cent, in Junagarh, Jamnagar, Panchmahal and surrendra nagar, less than one per cent in other districts like Kutch, Gandhinagar, Amreli, Banaskantha and Sabarkantha. So far, they cover a wide range of agro-industries, textile, chemical, mechanical and electrical industries, concentrated in six districts along the Ahmedabad-Bombay rail carridor-Ahmedabad, Kheda, Vaodara, Bahruch, Surat and Valsad, accounting for 70 per cent of factory employment in the state. Industrial Estate in Gujrat have underground power and drainage and a number of other supporting facilities and amenities, like bank, postal and telegraph, housing, shopping complexes, cinemas, schools, community halls, dispensaries, hotels and fire fightings stations.

The Estate has a total area of 238 hectares of which, 30 hectares has been reserved for common facility like testing, research and development, training facilities, conference hall and information centre. GIDC provides abundant water supply and arranges for effluent disposal, underground effluent disposal channel at Baroda for the leading industries. This is the first of its kinds in the country.

Today Ankleshwar and Vapi are the biggest Industrial Township for the chemical industries in Asia, and for GIDC they are spectacular achievements.

ACHIEVEMENTS OF INDUSTRIAL ESTATES IN GUJARAT:

Table No. 4.2 shows the details of number of Industrial Estates, Number of Units, Alloted and Unalloted sheds, Investment, production and employment in Gujarat Industrial Estates.

Table No. 4.2

ACHIEVEMENTS OF INDUSTRIAL ESTATE IN GUJARAT UP TO 1985

No.of Indus- trial Estates	Estab- lish- ment of Units	Number of sheds			Acqui- red land in pl- ots (Lakh Sq.KM.)	Inves- tment	Rs. in Crores	
		Allo- ted	Unal- loted	Tot- al			Produc- tion annually	Emplo- yment
117	8381	8275	388	8663	426	1009.58	2364.93	200000

Source: Jairam Krishnan, "Effluent disposal problem in Gujrat", Economic Times, July 21, 1985, pp. 4-8.

The above noted table reveals that Gujrat state had 117 Industrial Estates, with 8663 sheds of which 8275 had been alloted to the entrepreneurs by the end of 1985. The entrepreneurs had invested over Rs. 1009.58 crore producing gcods and services worth Rs. 2364 crore and providing employment to 2 lakhs people during the period under review.

INDUSTRIAL ESTATE IN HIMACHAL PRADESH:

By the end of 1985, the Industrial Estates of Himachal Pradesh had 66 medium and large scale units with an investment of Rs. 200 crore manufacturing items like synthetic yarn, paper, cement, automobile parts, forgings units, ceramic capacitors and metallic resistors etc¹.

In the year 1990 the State Government developed 16 Industrial Areas and 5 Industrial Estates. The Industrial Areas were established at Barotiwala, Nagrota, Mehtpur, Paonta-Saheb, Bilaspur, Shamshie, Solan, Parwanoo and Peo and Industrial Estates, Dharvanpur, Kangara, Jawali and Mehtpur².

About 133 plots and sheds had been leased out for 95 years to the entrepreneurs for setting up factories. These plots were made available in the areas of parwanoo, Mahalpur, Shaurshi, Bilaspur and Chambaghat other areas are also being developed at Shoghi near Shimla and Hamirpur.

PERFORMANCE OF INDUSTRIAL ESTATE IN HIMACHAL PRADESH:

Table No. 4.3 shows the performance of Himachal Pradesh Industrial Estates, such as capital investment,

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1. Sharma, P.N., "H.P. a heaven for investors", Economic Times July 13, 1985, pp. 1-4.
 2. India 1990, Publication Division, Ministry of Information and Broadcasting, Government of India, p.769.

number of employment, Registered small units of which number of sick units, number of industrial sheds by the end of 1985.

Table No. 4.3

THE PERFORMANCE OF INDUSTRIAL ESTATES IN HIMACHAL PRADESH

No. of Large and medium scale units	No. of small units registered	NO. of sick units	No. of sheds	Capital investment Cr.	Employment
66	14000	300	133	200	11000

Source: Sharma, P.N.; "H.P. a heaven for investors", Economic Times, July 13, 1985, pp. 1-4.

The above noted table indicates that Himachal Pradesh (HP) consisted of 66 medium and large scale units in 1985 with a total investment of Rs. 200 crore and employing about 11000 persons. In the small scale sector more than 14000 units stands registered with the department of industries including 300 sick unit in the state. Nearly 133 such sheds have been provided.

Himachal Pradesh Government charged only 2 percent general sales tax for the First Five Years and 4 percent for next five years. Besides it provides a 15 percent subsidy on the cost of diesel generating sets for power consuming

industries subject to maximum of Rs. 75000 if the project cost exceeds Rs. one crore.

The State Government provides subsidy on capital cost, subsidy on freight, subsidy on rate of interest and exemption of income tax for the first ten years.

PROBLEMS OF INDUSTRIAL ESTATES:

The Himachal Pradesh Industrial Estate are facing the following problems : poor communication system; Mismanagement, lack of experience both technical and managerial, and lack of will power on the part of entrepreneurs.

ROLE OF STATE GOVERNMENT:

The state Government has laid down high tension transmission lines to provide un-interrupted power supply. The government has established one window service. The government is preferring high technology, high precision and high value oriented index system, power, intensive and pollution oriented industries in the state.

INDUSTRIAL ESTATES IN HARYANA:

The State Government, the Directorate of Industries, Haryana State Industrial Development Corporation Ltd. (HSIDC Ltd.) and Haryana Development Authority (HUDA) had established 28 Industrial Estates, 4 Industrial Areas and 7

Industrial Development Colonies in Haryana during 1982. The Government of India has declared some areas as backward areas, i.e. Mohindergarh, Bhiwani parts of Hissar and Jind district. A subsidy of 15 percent upto a maximum of Rs. 15 lakhs on fixed capital is available to industries established in these areas. Moreover, term loans upto Rs. 30 lakhs by Haryan State Financil Corporation (HSFC) and upto Rs. 60 lakhs by HSIDC Ltd. are given on concessional rates of interest for the units in central as well as state declared backward areas, 20 percent subsidy subject to maximum of Rs. 20000 is granted to small units for the purchase of generating sets. Not only this but the newly established industrial units are also given rebate in income tax, electricity duty and water charges etc.

INDUSTRIAL PLOTS AND SHEDS DEVELOPED BY DIRECTORATE OF INDUSTRIES:

The Directorate of Industries is the only agency which has established a number of Industrial Estates in different parts of the Haryana. An idea of plots and sheds developed by Directorate of Industries can be had from table No. 4.4.

Table No. 4.4

INDUSTRIAL PLOTS AND SHEDS DEVELOPED BY DIRECTORATE OF
INDUSTRIES IN HARYANA

Item	Total developed	Alloted	Percentage allotted	Total No.on which industrial activity is going on	Percentage allotment
Plots	1092	1011	92.0	576	52.7
Sheds	236	214	90.6	163	69.0

Source: D.P. Ghanghas, "Industrial Estates in Haryana", An Appraisal: Yojana, 16-30 June, 1982, p.24.

The above noted table reveals that in 1982 the Directorate of Industries developed 1092 plots of that 1011 plots were allotted to the entrepreneurs showing 92 per cent utilisation. The Directorate of Industries also developed 236 sheds of which 214 sheds were allotted to the entrepreneurs-indicating a 90.6 per cent utilisation. These show that utilisation of plots is higher than those of sheds.

INDUSTRIAL PLOTS AND SHEDS DEVELOPED BY VARIOUS AGENCIES:

The various agencies i.e. Directorate of Industries, HUDA and HSIDC Ltd. have developed a number of industrial plots and sheds in Haryana which can be seen in table No. 4.5

Table No. 4.5

THE INDUSTRIAL SHEDS AND PLOTS DEVELOPED BY VARIOUS
AGENCIES IN HARYANA

Agency	Total no.of plots/ sheds develo- ped	No.of plots allo- ted	Percen tage of allotm- ent	No.of plots/ sheds on which industrial activity is going on	Percentage of utilisa- tion
Directo- rate of Industries	1063	976	91.8	527	49.5
HUDA	4190	3826	91.07	338	8.0
HSIDC Ltd.	681	654	96.0	119	14.2
Total	5934	5456	91.9	984	11.2

Source: D.P. Ghanghas, "Industrial Estates in Haryana", An Appraisal; Yojana, 16-30 June, 1982, p.23.

From the above table it can be observed that in 1982 HUDA developed 4190 Industrial sheds and plots of which 3826 sheds and plots were allotted accounting 91.07 per centage of utilisation. The Directorate of Industries developed 1063 Industrial plots and sheds out of which 976 plots and sheds were allotted during the same period. The HSIDC Ltd. developed only 681 plots and sheds of which 654 sheds were allotted. About 984 plots and sheds were under construction

in Haryana. Thus, it can be seen that the above various agencies are play a vital role in the development of plots and sheds.

OUTLAY ON INDUSTRIAL ESTATE/AREAS DURING THE PLAN PERIOD:

The total outlay for the development of Industrial Estates in Haryana during the plan periods can be seen from the table No. 4.6.

Table No. 4.6

PLAN OUTLAY ON INDUSTRIAL ESTATE/AREA DURING THE PLAN PERIODS IN HARYANA

(Rs. in Lakhs)						
Haryana			India			
Plan	Estates/ Area	Industry Mineral	Estate/ Areas as per- centage of indu- stry and Mineral	Estates/ Areas	Indus- try and Mineral	Estates/ Areas as percent- age of industry and Minerals
Annual Plan (1965-66)	12.82	201.94	6.3	760	163700	0.45
Fourth Plan	100.85	920.00	10.9	1570	310700	0.5
Fifth Plan	31.78	713.30	4.3	1760	782200	0.22
Five Year Plan	100.00	2316.00	4.3	4500	103500	0.43
Sixth Plan (1980-85)	119.50	3200.00	3,7	--	--	--

Source: D.P. Ghanghas, "Industrial Estates in Haryana", An Appraisal: Yojana, 16-30 June, 1982, p.22.

Table No. 4.6 shows that the outlay on industry and minerals have been higher in Haryana than the All India Level. With the launching of Fourth Five Year Plan in 1969, the stage was set for the economic development of Haryana. But it showed a downward trend in the coming plans. The percentage outlay on those programmes came down from 10.9 per cent in the Fourth Plan to 4.3 per cent in four years of Fifth Five year plan. It remained stagnant at 4.3 per cent in the Five year plan (1978-83) in which these were too much sector, especially in rural areas. But in Haryana's Sixth Five Year Plan (1980-85), the percentage further went down to 3.7 per cent.

PROBLEMS OF INDUSTRIAL ESTATES:

The problems faced by entrepreneurs in Industrial Estates of Haryana are as follows:

Nepotism and corruption are widely rampant; non-availability of imported components and equipments; bureaucracy of official is an obstacle in the implementation of these programme; lack of credit facilities; shortage of power and minerals; lack of metallic and other minerals; lack of industrial extension services; and marketing facilities.

SUGGESTION:

To overcome the above noted problems the State Government Directorate of Industries, HUDA and HSIDC should

work in coordination. All working agencies should establish a separate department which would look after the problems of entrepreneurs and malpractices of the official and should take urgent necessary action for the removal of the problems for the smooth development of entrepreneurs.

INDUSTRIAL ESTATE IN JAMMU AND KASHMIR:

Jammu and Kashmir state is one of the largest states of the Indian Union with an area of 2222236 square kilometers. The state has three main administrative divisions, namely Jammu, Kashmir valley and Ladakh. There are 10 districts with 40 towns and 60 community development blocks. The number of villages is 6559¹. The population of the state was 5987389 in 1991 census².

In 1991 the state had constructed 17 Industrial Estates with 247 sheds, having a constructed area of 385384 square ft. to foster the growth of small scale industries³. But due to non-availability of requisite skilled labour as well as the dearth of entrepreneurs, the growth of Small Scale Industries were very slow. However, Small Scale

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1. R.C. Paliwal, "Small industries, A Reference Book Small business publication", 4/45 Rcop Nagar, Delhi, p.504.
 2. India 1991, Publication division, Ministry of Information and broadcasting, Government of India, p. 315.
 3. Ibid, p. 505.

sector has made some progress particularly in Srinagar and jammu towns in the recent years. Manufacture of items like Cycle and Scooter tyres, aluminium, Utensils, aluminium conductors, etc. are likely to come up shortly.

INDUSTRIAL ESTATE IN KARNATAKA:

The Small Scale Industries in Karnataka state are mostly ancillary units engaged in the manufacture of part and components required by large scale factories. The existence of large units like the Hindustan Air Crafts Ltd. (HAL) Indian Telephone Industries (ITI) Hindustan Machine Tools (HMT), Bharat Electronic Ltd. (BEL) Bharat Earth Movers Ltd. (BEML) etc. has helped Small units to enter into ancillary relationship with these factories. The HMT, Industrial Estate started in 1959 is the first of its kind in India. The second one is the Ancillary Industrial Estate i.e. Bharat Electronic Ltd.

Karnataka state provides modern type of factory accommodation at nominal rates to Small Scale Units. The Industrial Estates are located at bangalore, Belgaum, Bellary, Bidar, Bijapur, Chickmagalur, Dandeli, Gulbarga, Harihar, Hassan, Hubli, Kadur, Kolar, Jamkhadi, Mangalore, Mercara, Mysore, Ramanagaram, Shimoga, Shiralakaoppa, Sira and Tumkur.

The state government sets apart specific areas for starting industries and undertakes development of Industrial Sites, by providing base i.e. amenities like water, electricity, etc. The construction of buildings for the factories were left to the industrialists which the developed plots are sold to them at economic rates. The centre selected are:

1. Mysore - Nanjangud, Belagula
2. Harihar - Davangere
3. Hubli - Dharwar
4. Shimoga - Bhadravali
5. Bellary - Hospet
6. Dandeli
7. Belgaum
8. Gulbarga
9. Around Bangalore
10. Around Mangalore¹

INDUSTRIAL ESTATE IN KERALA:

Kerala Government has several schemes of assistance for training technically qualified entrepreneurs and providing accommodation for their units in Industrial Estates and Industrial Areas on a preferential basis. Government is also providing institutional finance from

1. India 1991, Publication Division, Ministry of Information and Broadcasting, Government of India, pp. 531-538.

Rs. One lakhs to Rs. 3 lakhs without any security on the feasibility of the projects¹.

Industrial Estate, has been developed in Veli (Trivendrum), Aroor (Alleppey), Edayar and Angamali (Ernakulam) and (Palghat) Small Scale Industries are given land in these Development areas on full payment or on hire-purchase basis. The initial payment in the case of hire-purchase is 20 per cent and the balance is repayable in 10 yearly instalments. Under the scheme, "Development plots" land is given on full payment, or lease or hire-purchase basis. Initial payment in case of hire-purchase is 20 per cent of the cost, and the balance is payable in 20 yearly instalments².

Similarly facilities are being arranged in Quilon and Vikom, under the rural industries project. Land is also given on hire purchase to set up units in the Alleppey and Aroor chemical Industries Estates.

INDUSTRIAL ESTATES IN MADHYA PRADESH:

At the end of 1991 the Madhya Pradesh has 87 Industrial Estates, out of which 22 were urban Industrial Estates, 29

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1. India 1991, Publication Division, Ministry of Information and Broadcasting, Government of India, p.515.
 2. Ibid, p. 516.

semi-urban Estates and 36 rural Estates. Besides these, there was a significant increase in the number of Industrial Areas numbering about 125 in 1983-84, having 12232 acres of land.

The work of development of Industrial Areas and Estates was executed solely by the State Government and Small Scale Industries corporation but to have rapid regional industrial growth four new agencies were created to look after the work of Industrial Areas, which, infact, are subsidiaries of industrial development corporation. In all, there were 18 'NO industry districts' in the state, the regional agencies were asked to develop at least one growth centre in each of 'NO industry district'. It was proposed to construct 2000 sheds in 200 selected blocks during the seventh plan¹.

FUNCTION OF REGIONAL CORPORATIONS:

Besides, four regional corporation, were set up in November 1981, with equate funds, to play a vital industrial development of Madhya Pradesh. These corporation have been assigned the following tasks:-

1. To obtain land, either from Government or private sources in areas identified as having good potential growth

1. L.S. Herdenia, "Regional Corporation, can spur growth", Economic Times, July 11, 1985, pp. 1-4.

and development them to make available for industries. The development would include the coordination and organisation of supply of basic infrastructural requirements like electricity, water, sewage system, road communication up to and within the area to make that area a major industrial centre in the next ten years.

2. To develop the areas into well-equipped industrial centres by arranging for various other facilities and amenities like street lighting, post office, police station, school, health care centres, shopping and warehousing and recreation centres, testing centre, talex and telephone connection and tool rooms etc.

3. Apart from developing infrastructure, the corporation has to promote project ideas, encourage and assist parties in setting up units and carry out all promotional activities for their own areas.

4. These corporations are expected to function as the agencies to channel the various concessions and facilities given by the state government for industries that are established in the selected growth centres.

5. These corporations would, however, not finance industries directly but would assist units in their jurisdiction in obtaining term finance and generally act as

the prime co ordinator for all basic requirements of the industries, and

6. The regional corporations have identified a number of growth centres, namely, Banmore (Morena district), Sirgetti (Bilaspur district), Urla (Raipur district), Makshi (Shajapur district), Mandideep (Raisen district), Rewa (Rewa district), and Waidhan (Sidhi district). They have either been fully or partially developed¹.

The State Government has chosen some centres to set up functional complexes, which are as follows:

1. Electronic complexes;
2. Agro-based complex at pandhurna and Khajiri in Chhindware district;
3. Bullock cart complex at ten selected places;
4. Leather based complex in Raipur district; and
5. Stainless steel complex at Sagar.

The State Government broadly indentified the following growth centres or areas from the point of view potential for industrial development, they are as under:

1. Bohpal (Mandideep)
2. Indore - Dewas,
3. Satna - Rewa,

1. L.S. Herdenia; "Regional Corporations can spur growth", Economic Times, July 11, 1985, pp. 1-4.

4. Jabalpur - Katni,
5. Ujjain - Retlam
6. Gwalior - Banmore, and
7. Bilaspur - Champa - Korba.

PROBLEMS IN INDUSTRIAL ESTATES:

Madhya Pradesh is endowed with natural resources, In spite of this it is one of the most backward states of the country. The lack of irrigation facilities and a slow rate of industrial growth are responsible for the failure to overcome backwardness. The main problems are as under:-

1. lack of water facilities in many places;
2. poor banking facilities;
3. lack of street lights;
4. problem of law and order;
5. lack of tele-communications facilities;
6. lack of entertainment; and
7. availability of substandard raw materials.

CONCLUSION:

Madhya Pradesh is providing favourable industrial environment for prospective entrepreneurs, but a number of lapses are found in the policy decisions, which slow down the speed of development. The state government should create one organisation which would solve the problems of entrepreneurs in Industrial Areas.

INDUSTRIAL ESTATES IN MAHARASHTRA:

The Maharashtra Industrial Development Corporation (MIDC) has been put incharge of 68 Industrial Estates in the state. MIDC was set up in 1962 with a view to promote and accelerate growth and development of industries all over the state. The main objectives of MIDC are as follows:

1. to achieve balanced industrial development of the entire state, with particular emphasis on the development of industries in the developing parts,
2. to provide basic infra-structure in the form of developed plots, roads, water supply, drainage and common facilities,
3. to facilities entrepreneurs in setting up any industry with ease and speed, and
4. to halt the haphazard growth of industries, regroup them, and shift industries out of residential areas.

ROLE OF MIDC:

MIDC is playing the following important role in the development of Industrial Estates in Maharashtra:-

1. to identify new locations for Industrial Estates in the developing parts,
2. to explore new opportunities for entrepreneurs,
3. to provide developed plots with clear titles,

4. to give advise to the entrepreneurs about the initial investment,
5. to provide funds to Maharashtra State Electricity Board (MSEB) to stretch power lines, and
6. to provide regular water supply and housing etc.

PROGRESS OF INDUSTRIAL ESTATES IN MAHARASHTRA:

The following table shows the progress of Industrial Estate in Maharashtra till 1987.

Table No. 4.7

PROGRESS OF INDUSTRIAL ESTATES IN MAHARASHTRA

(Rs.in Crores)									
No.of Indus- trial Estat- es	No.of units estab- lished	No.of sheds	No.of plots for major seg- ments	No.of plots for small seg- ments	Deve- loped (in hect- ares)	MIDC pos- ses- sed land (in hec- tares)	Cap- ital inv- est- ment	Annual turn over	Empl- oym- ent
68	1151	1895	1823	1788	1224.12	1201.82	400	899	50000

Source: Manju Ghodke, "Maharashtra Industrial Estates", Economic Times, May 1987, p. 29.

Table No. 4.7 shows that in Maharashtra there are 68 Industrial Estates, with 1151 units, 1895 sheds, 1823 plots for major segments, 1788 plots for small segments till the end of 1987. The capital investment in all these Estates

stood about Rs. 400 crore. The value of annual turnover was Rs. 899 crore employing about 50000 people. This shows a tremendous rise in the development of Industrial Estates in Maharashtra.

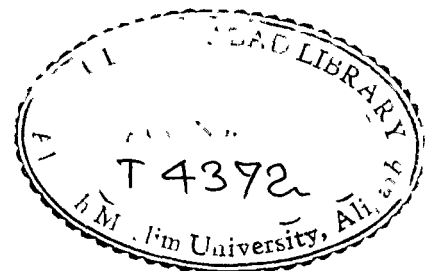
Further, in the Seventh Five Year Plan, (MIDC) proposed to set up 32 new Industrial Areas in different parts of the state, which envisaged acquisition of 8,266 hectares, land at an estimated cost of Rs. 37.12 crore of these 29 Industrial Areas were in the developing areas and only 3 in the developed areas.

PROBLEMS OF INDUSTRIAL ESTATES:

The problems faced by the entrepreneurs in the Industrial Estates are following:

- Double Octroi duty, lack of internal transport facilities, Municipality taxes, and payment of donation to MSEB for new connections.

Form the foregoing discussion, it may be concluded that the Industrial Estates are very conducive to the growth of more industries even in for flung areas, Aurangabad, Nasik, and Nagpur have also developed very fast.



INDUSTRIAL ESTATE IN MANIPURE:

At the end of 1991 the state Manipure had 18 Industrial Estates with built up sheds and were given on lease or hire purchase to the entrepreneurs. Under the scheme "Small Scale production centre in N.E.S. block" the beneficiary of the unit was given a maximum of Rs. 8000 towards the cost of land for setting up the unit¹.

Recruiting a new established Industrial Estate has been developed in Takyel which is two miles from Imphas town. Imphal town is served by IAC and direct flight is possible from Calcutta, Guwahati and Silcher, common facility and service centre facilities has been available here in addition to the common postal bank, and polic facility that are being provided on branch of the small industries service institute, Guwahati, is also being opened in the Estate.

INDUSTRIAL ESTATE IN MEGHALAYA:

A plan for the manufacture of tanlalum capicities has been set up by Meghalaya Electronics Development Corporation in collaboration with M/s FIRADEX of France at Barapani Industrial Area near Shillong².

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1. India 1991, Publication Division, Ministry of Information and Broadcasting, Government of India, p.426.
 2. India 1990, Publication Division, Ministry of Information and Broadcasting, Government of India, p. 426.

INDUSTRIAL ESTATE IN MIZORAM:

Mizoram is industrially backward state of the country and has only some cottage industries which are engaged in the production of handloom and handicraft. In the year of 1988-89 an Industrial Growth Centre at Laungmual, a mini Industrial Estate, a handloom and handicraft development corporation and a rural industrial development centre were established¹.

INDUSTRIAL ESTATE IN PUNJAB:

The main objectives of the Industrial Area/Focal Growth points/Industrial Estates/Industrial Colonies in Punjab was to provide all infrastructural facilities at one point by providing developed plots and sheds.

In Jalandhar the industries department had developed four Industrial Estates, one Industrial Development Colony, two Focal Points and one Industrial Areas with a total of 734 plots². The biggest of the four Industrial Estates is the one on the G.T. Road bypass with 40 plots. The other three Industrial Estates are located at Adampur, Naodar and Rurkakalan³. In addition to the Industrial Estates, an Industrial Development Colony was set up at the G.T. Road bypass where 100 plots were allotted to Small Scale Industrialists⁴.

1. Ibid, p. 797.

2. Lal Mohan; "Poor amenities in jalandhar", Economic Times, July 6, 1985, p.1.

3. Ibid, p-1.

4. Ibid, p-1.

The industries departments has organised two Focal Points in the district. One of these is at Nawansher, where 115 plots were carved out in 1985. The bigger Focal point is at Jalandhar on the Kapurthala Road with 126 plots which were allotted to manufactures of sports good and another 70 plots to units manufacturing surgical instruments¹.

The District Industries Office had proposed the setting up of two more Industrial Complexes at the Kapurthala Road, one for the Rubber goods industry and another for leather goods industry in 1985².

PROBLEMS OF INDUSTRIAL ESTATES IN PUNJAB:

The allottees of industrial sheds, though the major beneficiaries have complained that construction of Industrial Estates is substandard materials, but no one is ready to leave the premises because the premium is being so high. Similar complaints are also received from Ludhiana, Jalandhar, Hoshiarpur, Amritsar, Bhatinda, Ferozpur, Gurdaspur or Malerkotla Industrial Estates.

In Patiala and mandi Gobindgarh the common talk is 'incentive delayed is incentive denied' the government has announced a number of incentives for industries but there

1. Ibid, p-1.

2. Lal Mohan, OP, at, p-1.

was always crippling delay in the disbursal of the incentives. In Rajura, the businessmen have stopped putting up new units and even not keen to expand their units¹.

Besides, the other problems faced by the Industrial Estates are as follows:

1. Unfavourable political climate in the state;
2. erratic payments to industrialists; and
3. turbulent revival of sikh fundamentalism shock.

INDUSTRIAL ESTATES IN RAJASTHAN:

By the end of 1985 Rajasthan had 26 Industiral Estates in the name of Industrial Areas. These were managed by Rajasthan state Industrial Development Corporation (RIICO). RIICO created a large number i.e. 135 Industrial Areas in Rajasthan. The total number of Industrial Areas in Rajasthan was 161 having 6242 hectare of land. It acquired 8164 hectares of land for this purpose². Rajasthan state Industrial development corporation (RIICO) supply 70 lakhs gallons of water to the Industrial areas³.

ACHIVEMENTS OF INDUSTRIAL ESTATES IN RAJASTHAN:

An idea of achivements of Industiral Areas in Rajasthan can be had from the following table.

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1. Special Correspondant of Economic Times, "Punjab Units Lack of Planned Growth", Economic Times, July 19, 1985, p.1.
 2. Milap Chand Dandia; "Haphazard Growth in Rajasthan", Economic Times, July 15, 1985, pp. 1-4.
 3. Ibid, pp. 1-4.

Table No. 4.8ACHIEVEMENTS OF INDUSTRIAL AREAS IN RAJASTHAN

No. of Indus- trial Estates	No.of units	No.of sheds	No.of plan to deve- loped plots	No.of deve- loped plots	Allo- ted plots	Plots pro- cess to Develop- ment	Inves- tment annua- lly	Produ- ction annua- lly
161	5000	942	19670	14422	12033	7636	25	40

Source: Milap Chand Dandia; "Haphazard Growth in Rajasthan",
"Economic Times, July 15, 1985, pp. 1-4.

From the foregoing table it can be deduced that Rajasthan state had 161 Industrial Areas in 1985. The RIICO developed a total of 19670 plots on the acquired land, 14422 industrial plots were developed of which 12033 already stood allotted. The remaining 7636 plots are in the process of development. Besides land, RIICO also allotted 942 readymade sheds to entrepreneurs. So far a little more than 5000 units in the Industrial Areas had gone into production. This shows that about 7000 allottees of industrial lands have yet to commence production. The corporation spent Rs.25 crore on the development of Industrial Area. The total approved outlay for the development of Industrial Areas in the state was Rs. 40 crore in 1985.

THE RIBBON DEVELOPMENT BELT:

The Rajasthan State Industrial Development Corporation (RIICO) has decided to change its Industrial Area Development Policy. It has National Highway from Delhi to Ahmedabad which is named as 'the Ribbon Development Belt'. The places which comes under 'Ribbon Development Belt' are Bhiwadi, Shahjahanpur, Bihror, Shahpur, Jaipur, Bagru, Dudo, Kishanagar, Ajmer, Beawer, Pali, Sumerpur, Sheogand, Sirohi, Swaroopganj and Abu Road.

The RIICO has also decided to provide housing complexes at Vishwakarma Industrial Area, in Jaipur, Bhiwadi, Alwar, Behror, Ganganagar and Rawla (Ganganagar). Fifteen hundred residential plots with all basic amenities will be allotted to industrialists having units in the respective area.

In Bhiwadi 500 houses were built in 1985 by the Housing Board for individuals and not for firms or companies. But the units can buy houses for their executives and other employees only in the name of company. To get rid of this problems RIICO decided to develop housing complexes on its own and allot them to their own units.

PROBLEMS IN INDUSTRIAL ESTATES:

Haphazard Development of Industrial Areas in Rajasthan has created lot of problems for entrepreneurs as

such lack of basic amenities, increase in the demand of industrial lands, increase in sale price of the plots, lack of telephone, telex and postal facilities, poor public transport facilities, housing facilities, municipal facilities like daily scavenging and frequent power cut. The State Electricity Board (SEB), the urban improvement trusts, the municipal bodies, Housing Board, Transport Development, Post and Telegraph department etc. have little love for the Industrial Areas.

Therefore, in order to achieve a rapid growth of Industrial Estates the Government of Rajasthan should come forward to remove the above stated problems.

INDUSTRIAL ESTATE IN TAMIL NADU:

The Tamil Nadu State had 51 Industrial Estates in 1990 which are divided into following five categories:

- i) Conventional Industrial Estates where different types of industries are located,
- ii) Functional Industrial Estate are those where certain special types of industries are located,
- iii) Ancillary Industrial Estates cater to the needs of the Large Scale Industries,
- iv) Co-operative Industrial Estates are another type of Industrial Estates with built up factory units of different sizes, and

V) Private Industrial Estates are set up with the assistance of leading private Industrial Estates¹.

The Tamil Nadu Small Industries Development Corporation Limited; was set up in the year 1970 with the following objectives:

1. to provide infrastructural facilities to Small Scale Industries;
2. to provide industrial worksheds and developed plots,
3. to built sheds for tiny sector industries in rural and backward areas;
4. to extending marketing support for small scale industries;
5. to sanction central and state capital investment subsidy;
6. to make available key raw materials, to sanction interest free sales tax loan, and to sanction L.T. power traiff subsidy;
7. to sanction margin money assistance; and
8. to rehabilitate sick small scale industries.

PROGRESS OF INDUSTRIAL ESTATES IN TAMIL NADU:

The following table shows the progress of Industrial Estates in Tamil Nadu:

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1. A. Jaffarullah, "Entrepreneurial development in Small Scale Industries in Ambattar and Guindy Industrial Estates of Tamil Nadu", unpublished Ph.D. thesis university of Madras, 1990.

Table No. 4.9PROGRESS OF INDUSTRIAL ESTATES IN TAMIL NADU

(Rs. in Crores)					
No. of Industrial Estate	Work sheds	Tiny sheds	Investment annually	Production	Employment
51	1355	10.23	15.72	140	70000

Source: a) A jaffarullah, "Entrepreneurial Development in SSI in Ambattur and Guindy Industrial Estates of Tamil Nadu", unpublished Ph.D. thesis, University of Madras, 1990.

B) K.N. Srinivasan, "Industrial Estate in Tamil Nadu", Economic Times, September 23, 1980, pp. 1-4.

The above noted table shows that there were 1555 worksheds and 1023 sheds in 51 Industrial Estate till 1991, providing employment to about 70000 persons. The total production in these Estates amounted to Rs. 140 crore for the same period.

ACHIEVEMENT OF INDUSTRIAL ESTATE IN TAMIL NADU:

Table No. 4.10 shows the achievement of Industrial Estate in Tamil Nadu.

Table No. 4.10ACHIEVEMENT OF INDUSTRIAL ESTATES IN TAMIL NADU

No. of Industrial Estate	Rental sheds	Hire purchased sheds	Factory sheds	Deve- loped plots	No.of units	Employment
51	783	1365	1218	1018	3000	70000

Source: a) A Jaffarullah, "Entrepreneurial Development in Small Scale Industries in Ambattur and Guindy Industrial Estate of Tamil Nadu", unpublished Ph.D. thesis University of Madras, 1990.

b) K.M. Srinivasan, "Industrial Estate in Tamil Nadu", "Economic Times" September. 1980, pp. 1-4.

The above mentioned table shows that there were 783 Government rental sheds, 1365 hire purchased sheds and 1218 factory sheds in Industrial estates till 1990, which are under the administrative jurisdiction of SIDCO. There were 1018 developed plots, 3000 units, providing employment to 70000 people during the period under review.

PROBLEMS OF INDUSTRIAL ESTATE:

Tamil Nadu Industrial Estates are facing the following problems:

1. Low quality of raw materials, high cost, non-availability of raw materials and irregular supply of raw materials;
2. Non-availability of equipment and parts and non-availability of machinery and technical hands for operating the machines;
3. Frequent power failure-low voltage and inadequate supply of electricity;
4. Labour shortage situation particularly of skilled workers;
5. Technical problems;
6. Marketing problems;
7. Finance problems; and
8. Problem of common facilities.

INDUSTRIAL ESTATES IN UTTAR PRADESH:

Uttar Pradesh is one of the largest states in terms of population and second largest state in Central India in terms of total area. The Uttar Pradesh Government has been providing a large number of facilities for creating suitable infrastructure for the entrepreneurs which greatly helped in the establishment of new industries in relatively new areas. The expansion of the existing Industrial Estates was proposed during the seventh plan in the following manner:

1. Rania in Kanpur,
2. Chunar in Mirzapur district,
3. Roorkee in Saharanpur district, and
4. Varanasi.

On account of increasing pressure of demand for Industrial plots in the hill areas, five Industrial Estates were proposed to be established in 1985 such as, Muni-ki-keli, Pithorgarh, Chamoli, Uttarkashi, and Khatima.

ACHIEVEMENTS OF UTTAR PRADESH INDUSTRIAL ESTATES:

The achievements of Uttar Pradesh Industrial Estates during Fifth Plan, Sixth Plan and Seventh Plan can be studied from the following table.

Table No. 4.11

ACHIEVEMENT OF INDUSTRIAL ESTATE DURING THE PLAN PERIOD
IN UTTAR PRADESH

(Rs. in Crores)

Plan Period	No. of Industrial Estates	Establishments of units	Total No. of sheds			Total No. of plots			Production annually	Employment
			Alloted	Unalloted	Total	Alloted	Unalloted	Total		
Fifth	65	1950	90	192	282	2004	700	2704	20	11500
Sixth	80	--	936	254	1190	2244	751	3000	75	17050
Seventh	132	--	-	-	-	-	-	-	-	-

Source: S.M. Jaffar, "Allotment of faulty plots in Uttar Pradesh Pradesh", Economic Times, July, 1985, p-1.

From table No. 4.11 it can be observed that in the Fifth Five Year Plan there were 65 Industrial Estates achieving 1950 units, the total number of sheds and plots were 282 and 2704, of these, 90 sheds and 2004 plots were allotted, and 192 sheds and 254 plots were unallotted. In the Sixth Five Year Plan there were 80 Industrial Estates in Uttar Pradesh. The total number of sheds were 1190 of which 936 sheds allotted and 254 were unallotted, the total number of plots were 3000 of which 2244 plots allotted and 751 plots unallotted. In the Fifth Five Year Plan annually production worth Rs. 20 crore and providing 11500 persons employed and

during the Sixth Plan the total value of production worth Rs. 75 crore , 17050 persons were employed.

PROBLEMS OF INDUSTRIAL ESTATE IN UTTAR PRADESH:

There are a lot of discrepancy and faulty allotment of plots. Many plots have been allotted to under-serving persons, for example, in the Kanpur Industrial Estates, a plots has been allotted in the name of Charan Safe Works Ltd. But on accounts of official manipulation it was transferred in the name of an individual, which in itself is against the rules, although the factory and the establishment of the company are still on the same plot. The faulty working of the official of the Directorate of Industries has created serious problems in NOIDA. NOIDA is also facing so many problems such as higher sales tax rates, smuggling of goods, tole barriers, erratic power supply, improper functioning telephones, lack of medical facilities, and industrial accidents.

INDUSTRIAL ESTATES IN WEST BENGAL:

Industrial Estates in West Bengal are administered by the department of cottage and Small Scale Industries. These Estates are established at Asansol, Durgapur, Haldia, Kalyani, Kharagpur, Santaldih, Siliguri, Farakka, Cooch, Behar, Haora and Budge for accommodating different industries, Besides free Trade Zone (including export

processing zone) has been set up at Falta situated at a distance of 50 kms from Calcutta.

Table No. 4.12

FINANCIAL RESULTS OF DIFFERENT INDUSTRIAL ESTATES IN WEST
BENGAL FROM 1978-79 TO 1983-84

(Rs. in Thousands)					
	Gains(+)		Loses(-) of Industrial Estate		
	Baruipur	Kalyani	Hawrah	Saktigarh	Manicktala
No. of sheds	34	44	76	17	3
1978-79	-117	-452	-597	-061	-071
1979-80	-138	-532	-667	-148	-162
1980-81*	-140	-754	-1013	-113	-125
1981-82**	-123	-457	-872	-127	-095
1982-83	-140	-388	-1242	-124	-071
1983-84	-145	-405	-875	-130	-073

Source: P. Chattopadhyay, "Industrial Estate", The case of West Bengal, Economic Times, August 14, 1984, p.2.

* Actual

** Revised estimate

Table No. 4.12 reveals the financial result of different Estates which shows a dismal outlook. The loss incurred in the 34 Industrial sheds at Baruipur was Rs. 117 thousands in 1978-79, Rs. 138 thousands in 1979-80,

Rs. 140 thousands in 1980-81 and Rs. 123 thousands in 1981-82. The revised figures for 1982-83 and budget estimate figures for 1983-84 were Rs. 140 thousands and Rs. 145 thousands respectively. 44 Industrial sheds of Kalyani showed a loss of Rs. 452 thousands in 1978-79, Rs. 754 thousands in 1979-80, Rs. 457 thousand in 1980-81, Rs. 388 thousands in 1981-82 and Rs. 405 thousands in 1983-84. 76 Industrial sheds of Howrah suffered a loss of Rs. 597 thousands, Rs. 667 thousands, Rs. 1013 thousands, Rs. 872 thousands, Rs. 1242 thousands, and Rs. 875 thousands in 1978-79, 1979-80, 1980-81, 1981-82, 1982-83, 1983-84 respectively. Industrial sheds of Manicktala numbering 17, narrates the same story of loss from year to year to year being Rs. 0.71, Rs. 162, Rs. 125, Rs. 0.95, Rs. 071, Rs. 073, thousands for the respective years.

From the foregoing discussion it can be concluded that the above noted Industrial Estates are showing continuous loss in different years which is not a good sign of prosperity. The government should come forward to look into the matter and take urgent necessary action for the fruitful development.

INDUSTRIAL ESTATE IN DADRA AND NAGAR HAVELI:

Industrial development in Dadra and Nagar Haveli was started during the period of 1967-68 with the establishment

of Industrial Estate under cooperative sector by Danudyog Shahakari-sang Ltd. Therefore, three government Industrial Estates were developed at SILVASSA, MASAT and KHADDOLI. By October, 1989 there were 302 industries which included cottage, village and Small Scale Industries and 60 medium Scale Industries in textiles engineering, plastics, electronics, chemicals, pharmaceuticals etc. These industries, employed more than 7000 persons and produced goods worth Rs. 200 crore¹.

INDUSTRIAL ESTATE IN DELHI:

The National Small Industries Corporation has constructed an Industrial Estate in Okhla Delhi and another Estate was established at Badli in a rural area of Delhi during the First Five Year Plan. Today Okhla is India's symbol of success of small enterprises producing the goods worth Rs. 200 crore annually². During the First Five Year Plan and expenditure of Rs. 474.5 Lakhs³ was proposed. The Directorate of Industries has proposed a number of schemes viz.,

- (a) block loans for the construction of new industrial premises,

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1. India 1990, Publication Division, Ministry of Information and Broadcasting, Government of India, p.760.
 2. Anand Vardhana, "Okhla, symbol of small units success", Economic Times, July 1, 1985, pp. 1-8.
 3. R.C. Paliwal, "Small Industries, A reference book small business", Publication, 4/45 Roop Nagar Delhi, p. 524.

- (b) common facility centres for electronics industry, sports goods industry and leather goods industry;
- (c) setting up a small industries development corporation;
- (d) setting up a permanent exhibition-cum-emporium;
- (e) quality making scheme for house-hold electrical appliances; and
- (f) cost reduction of industrial consultancy cell¹.

The Directorate of Industries has also proposed the following:-

- 1. to develop industrial plots around the Badli Industrial Estate;
- 2. to set up rural Industrial Estate and Functional Industrial Estate for plastic, electronics, electrical goods and flatted factories for leather goods industry in Delhi².

There was also a proposal to set up an Export Promotion Corporation on the lines of a commercial house for purchase of goods from the Small Scale Industries units and market them in foreign countries.

The Delhi Small Industries Development Corporation (DSIDC) has developed eight Industrial Complexes in Delhi, one in Phase I and three in Phase II Okhla Industrial Area distinct from the Okhla Industrial Estate) and other

1. Ibid, p. 425.

2. Ibid, p. 425.

being at Jhilmil, Tahirpur, Wazirpur, Lawrence Road and Rohtak Road, there were 838 industrial sheds with a turnover of Rs. 15 crore and providing employment to 14000 persons till 1985¹.

MAYAPURI AND NARAINA INDUSTRIAL ESTATES:

Mayapuri and Naraina Industrial Estates in Delhi are producing a wide range of products, such as readymade garments, plastics, cosmetic, engineering glassware, hosiery, T.V. sets and components, radios, scientific and optical instruments for domestic and export markets.

The progress of Mayapuri and naraina Industrial Estates up to 1985 can be studied from the following table.

Table No. 4.13

PROGRESS OF MAYAPURI AND NARAINA INDUSTRIES ESTATES

(Rs. in Crores)				
No. of Industrial Estates	Total No. of units	Total Production	Production from Export	Employment
2	1800	200	70	20000

Source: Tayagaraj Sharma, "Industrial Estate Mayapuri and Naraina humming with activity" Economic Times, July 3, 1985, pp. 1-4.

1. Vardhan, Anand, "Industrial Estate, DSIDC to go in for joint ventures", Economic Times, July 15, 1985, p.4.

Table No. 4.13 shows that there were 1800 units of different sizes producing the goods worth Rs. 200 crore and providing employment to about 20000 people.

WAZIRPUR INDUSTRIAL ESTATE:

The Wazirpur Industrial Estate in the Outskirts of Delhi having Asias' biggest stainless steel utensils manufacturing complex producing the goods worth Rs. 30 crore per month¹. The Wazirpur complex had 930 industrial units in 1985 involved in diversified activities, such as stainless steel utensils, hosiery, soap, light machinery, plastic goods, gas stoves, autoparts, cutting tools, electronic goods, machine tools and hot and cold re-rolling mills².

CONCLUSION:

From the foregoing analysis, it can be inferred that the state-wise performance of the Industrial Estates in India has been by and large satisfactory. However, some states such as Meghalaya, Manipur, Assam, Goa, J.K., Kerala and Dadar Nagar Haveli are facing some problems of different types which need to be tackled by the Government on war footing if these Industrial Estates are to be strengthened for steady growth and development.

1. Kumar Rahul, "Wazirpur slums with Rs. 36000 turnover", Economic Times, July 2, 1985, pp. 1-4.

2. Ibid, pp. 1-4.

After discussing the performance and problems of Industrial Estates in different states of India the researcher has tried to examine the growth and development of Industries in Aligarh district in the next chapter.

CHAPTER - 5

CHAPTER - V

GROWTH AND DEVELOPMENT OF INDUSTRIES IN ALIGARH DISTRICT

— AN ANALYSIS

The present chapter entitled "Growth and Development of Industries in Aligarh district", gives a detailed account of growth and development of Industries in Aligarh district. For the purpose of study three types of industries have been taken i.e. small scale industries, Medium and Large Scale Industries, and Handicraft industries.

The Small Scale Industries have been classified into two broad categories i.e. Traditional Small Scale Industries and Modern Small Scale Industries. Traditional Small Scale Industries include, Khadi and handloom industries, village industries, handicraft, sericulture and coir industries etc. Modern Small Scale Industries produce a wide range of sophisticated products such as, television sets, electronic, control system, various engineering products, particularly as ancillaries to the large industries¹.

Aligarh district has two broad categories of small scale industries viz., the metal industries and non-metal industries. The non-metal industries largely comprises the

1. Dutt Ruddar & Sundharam K.P.M., "Indian Economy", Sultan Chand & Company Ltd., 1985, p. 553.

agro-based and allied industries and metal industries are popularly known for lock making industries, building fitting material industries, brassware industries, Hardware and Murtiyan industries. Besides these, there are some other important industries also namely, Machinery parts and Tools, Electrical Machinery Operator, Repairing and servicing job, Hosiery and garments, wood, paper products, food products, leather products, rubber and plastic products and chemical products etc.

Aligarh is very famous for Lock Industry, electrical equipment, building fitting material, glass-beats, light engineering, handloom weaving and cotton carpet, while Sikandra Rao, Atrauli, Khair and Bijoli are the centres of the handloom weaving. Sasni is well known for cotton ginning and ghee industries.

Handicraft industries are the relies of the past, they are generally controlled by guilds. The individuals producer works independently in this home and controls the entire process. For legal purposes, some attempts have been made to define handicrafts as enterprises employing not more than ten persons, or some other arbitrary figure, those handicraft, which are carried on with the help of hired labour and with advances in cash or in raw materials from the cpaptalistic middlemen.

The handicraftsmen turnout a full finished products, and produces mainly for the local market, even here the boundary is flexible because some artistic product and some less artistic type, i.e. rugs and carpets and certain handloom products have international demands as well as home market¹.

Aligarh district has, therefore, become a home of Small Scale Industries. But there are some large and medium scale industries also in the district which play an important role in the development of Aligarh district, i.e. generation of large number of employment, development of export and import from the other districts and large cities of other states. Some important industries are, Darshan Oil Private Limited, Glindia, U.P. Government Central Dairy Farm, Kisan Sahkari Chini Mill, Tiger Lock Private Limited, Tiger products Private Limited, Tiger Hardware and Tools Limited, Prag Vanaspati Product, Prag Ghee & Oil Mills, Bijli Cotton Mills and Central Government Press.

Aligarh is however, one of the most important district of Uttar Pradesh. Several local factors like its rich agricultural potential, nearness to Delhi, availability of cheap labour and uninterrupted power supply, etc. have

1. Farooquee, Q.H., "Small and Cottage Industries", Publication Division, AMU, Aligarh, 1958, p.15.

made the district of Aligarh a viable units for industrial location.

DIFFERENT TYPES OF SMALL SCALE INDUSTRIES ESTABLISHED IN ALIGARH DISTRICT:

Table No. 5.1. shows the year-wise establishment of Small Scale Industries in Aligarh district during the period starting from 1984-85 to 1991-92.

Table No. 5.1 reveals that upto 1984, there were 2200 industries in Aligarh district, which rose to 5920 in 1991-92 an increase of 169.09 per cent over 1984. Table further indicate the types of industries established in Aligarh district. A close review of the table reveals that repairing and servicing industries are highest in number i.e. (1040), followed by lock industries (691), Food products (468), Metal products (449), Non-metal products (417), Leather products (414), Chemical products (349), Building fittings (377), Brass Hardware (320), etc.

To sum up, it can be said that the repairing and servicing industries are flourishing well in the district followed by Lock industries.

TABLE NO. 5.1

YEARWISE ESTABLISHMENT OF DIFFERENT TYPES OF SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT

Type of Industries	Year of establishment									
	Upto 1984	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	Total
1. Metal Products	-	50	33	37	63	33	25	127	81	449
a) Lock Industries	293	43	25	27	55	38	58	89	63	691
b) Building Fitting	200	20	06	04	17	06	18	26	40	337
c) Brass, Hardware & Murtiyan	157	10	18	43	18	34	16	20	04	320
2. Non-Metallic products	157	15	09	16	10	15	15	101	79	417
3. Machinery parts and Tools	25	01	06	04	05	06	09	14	11	81
4. Electrical Machinery Operator	48	12	08	38	16	17	24	28	18	109
5. Repairing & Servicing Job	141	38	152	208	241	86	42	86	46	1040
6. Hosiery and Garments	126	06	11	09	04	24	31	71	37	319
7. Wood	77	12	07	10	09	63	27	25	24	254
8. Paper products	85	04	16	12	11	14	11	27	11	191
9. Food products	245	27	26	20	13	44	48	28	17	468
10. Leather products	200	28	02	04	04	99	73	04	--	414
11. Rubber and plastic products	42	06	13	02	03	14	03	04	03	90
12. Chemical & Chemical product	230	17	33	39	04	06	12	05	03	349
13. Others	174	02	--	02	04	11	46	39	13	291
Total	2200	291	365	475	477	510	458	696	450	5920

Source: District Industries Centre, Aligarh, July 20, 1992.

**PROGRESS OF SMALL SCALE INDUSTRIES IN DIFFERENT BLOCKS OF
AALIGARH DISTRICT:**

Table No. 5.2 shows the achievement of Small Scale Industries in all Blocks of Aligarh district.

Table No. 5.2

**BLOCK-WISE PERFORMANCE SMALL SCALE INDUSTRIES IN
ALIGARH DISTRICT**

(Rs. in Lakhs)					
Name of blocks	No. of Industries	Capital investment	Installed capacity	Production	Employment
Aligarh city	4809	2686.27	4885.95	24356.75	15326
Hathras	443	720.31	2208.20	2806.37	2822
Iglas	120	61.35	78.01	79.31	513
Atrauli	101	65.84	94.66	147.56	553
Sikandra Rao	90	104.89	149.40	225.62	487
Sasni	90	69.51	366.80	524.85	2171
Khair	70	29.46	25.95	39.73	157
Jawan	09	41.90	--	243.85	66
Dhanipur	20	139.19	--	1684.60	467
Lodha	23	22.29	--	56.98	86
Gonda	11	5.81	5.94	18.33	78
Mursan	45	35.46	61.48	109.60	416
Akrabad	10	5.40	--	18.66	38
Hassayan	25	18.08	35.38	25.86	380
Gangiri	15	27.21	--	25.38	57
Baijoli	03	11.39	--	9.90	52
Tappal	23	10.72	14.04	13.58	181
Chandaus	13	3.64	--	17.87	47
Total	5920	4058.70	7925.81	30434.86	23897

Source: a) Compiled from the Industrial Directory of DIC, Aligarh, 1990.

b) The figure for 1991 has been worked out by the Research Scholar by the Country of Mr. T.P. Singh, DIC, Aligarh, November 20, 1992.

Table No. 5.2 shows that Aligarh city has the highest number of Industries i.e. 4809, with a total investment of Rs. 2686.27 lakhs, a total production valued at Rs. 24356.75 lakhs and an employment opportunity for 15326 persons till 1991. In order of progress, Hathras has the second place with 443 Industries and a total investment of Rs. 720.31 lakhs for the same period. It generated employment opportunity to 2822 persons. The Installed capacity of this block was of the order of Rs, 2208.20 lakhs with the value of total production ammounting to Rs. 2808.37 lakhs. The other blocks of Aligarh districts show the progress in the manner as such, Iglas (120), Atrauli (101), Sikandra Rao and Sasni (90 each), Khair (70), with a total investment of Rs. 61.35 lakhs, 65.84 lakhs, 104.31 lakhs, 69.51 lakhs, 29.46 lakhs, an employment opportunity to 513, 533 487, 2171 and 157 persons and a total production valued at Rs. 79.31 lakhs, 147.56 lakhs, 255.62 lakhs, 524.85 lakhs and 39.73 lakhs respectively for the period under review. From the foregoing analysis, it can be concluded that Aligarh city and Hathras are the backbone of the development of Aligarh district.

PROGRESS OF SMALL SCALE INDUSTRIES IN ALIGARH CITY:

Table No. 5.3 shows quinquennial break-up of establishment of Small Scale Industries in Aligarh city.

Table No. 5.3PROGRESS OF THE SMALL SCALE INDUSTRIES IN ALIGARHCITY TILL 1991

(Rs. in Crores)					
Year	No.of Indus- tries	Capital investment	Installed capacity	Production	Emple- yment
Before-1950	15	22.24	195.00	48.51	124
1951-1955	07	02.27	94.37	19.16	45
1956-1960	10	05.09	361.10	228.24	98
1961-1965	09	04.35	218.95	12.34	72
1966-1970	24	09.77	266.60	89.37	246
1971-1975	143	32.37	692.49	524.50	852
1976-1980	296	75.17	1427.07	661.00	1999
1981-1985	887	197.00	1630.40	866.20	2249
1986-1991	2929	2337.71	--	21907.43	9641
	4809	2686.27	4885.98	24356.75	15326

Source: a) Compiled from Industrial Directory of DIC, Aligarh 1990.

The figure for 1991 have been collected by the courtesy of Mr. T.P. Singh, DIC, Aligarh, Nov. 19, 1992.

The above mentioned table indicates that the years before 1950 i.e. since inception till 1991, there were 15 units with a investment of Rs. 22.45 lakhs, providing

employment to 124 persons. The total production valued at Rs. 48.51 lakhs. In the succeeding years, the establishment of industries was very slow. There were only 07 new establishments during 1951-1955 with an investment of Rs. 2.27 lakhs and the value of production was Rs. 19.16 lakhs. During 1956-60 the number of new establishments was only 10 with total investment of Rs. 05.91 lakhs and employment opportunity to 98 persons. The installed capacity was of the order of Rs. 361.10 lakhs and total production valued at Rs. 228.24 lakhs. In 1961-65 there were only 9 units in which Rs. 4.35 lakhs were invested and they produced the goods worth Rs. 12.34 lakhs. In the forthcoming two decades i.e. (1971-1991) the establishment of industries was very high. There were 143 new units established in 1971-1975. In 1976-1980 (296) units, in 1981-1985 (887) units and in 1986-1991 (2929) units with a total investment of Rs. 32.37 lakhs, 75.17 lakhs, 197.00 lakhs and 2337.71 lakhs respectively with an employment opportunity to 852, 1999, and 2249 and 9641 persons, the installed capacity of Rs. 692.49 lakhs, 1427.07 lakhs and 1630.40 lakhs and a total production valued at Rs. 524.50 lakhs, 661.00 lakhs, 816.20 lakhs and 21907.43 lakhs respectively.

From the foregoing analysis, it can be observed that there has been continuous increase in the establishment of

new industries and it is hoped that even in the future there will be a continuous development of industries.

PROGRESS AND ACHIEVEMENT OF LARGE AND MEDIUM SCALE INDUSTRIES IN ALIGARH DISTRICT

The following table indicates the progress and achievements of Large and Medium Industries in Aligarh district.

Table No. 5.4

PROGRESS OF LARGE AND MEDIUM SCALE INDUSTRIES IN ALIGARH DISTRICT

Block	No. of Industries	Name of the Industries	Capital investment	Installed capacity	Production	Employment
Aligarh city	6	1) Tiger Lock P.Ltd.	Closed	--	--	--
		2) Tiger Product P.Ltd.	Closed	--	--	--
		3) Tiger Hardware & Tools	35.00	200.00	90.00	225
		4) Parag Vanaspati Product G.T.Road Aligarh	54.00	1825.00	925.00	200
		5) Prag Ghee & Oil Mills, Ramghat Road, Aligarh	660.00	2000.00	1390.00	600
		6) Central Govt. Press, AMU Road Aligarh	Data is not available			5000
Hathras city	1	Bijli Cotton Mills Medu Raod,	225.00	125.00	--	1550
Lodha	1	Darshan Oil Pvt. Ltd.	150.00	150.00	--	150
Jawan	3	1) Glindia, Galxo Manzoor Gari	72.00	3500.00	2285.00	600
		2) U.P. Govt. Central Dairy Farm, Charait	--	355.00	216.95	300
		3) Kisan Sahakari Chini Mill, Satha	315.00	--	--	250

Source: Industrial Directory, DIC, Aligarh, 1990. p-1.

Table No. 5.4 reveals the progress of large and medium scale industries. It shows that Aligarh city has 6 large and medium scale industries viz. Tiger Hardware and Tools, Prag Vanaspati Product, Prag Ghee & Oil Mills, and Central Government Press. Two industries viz. Tiger Lock Pvt. Ltd., Tiger Product Ltd. is closed. Hathras city has one industry namely Bijli Cotton Mills and Lodha also has one industry namely, Darshan Oil Pvt. Ltd. In Jawan there are three large and medium scale industries viz., Glindia Glaxo, U.P. Government Central Dairy Farm and Kisan Sahkari Chini Mills.

The Central Government Press has a vital role in the development of Aligarh district generating employment opportunity to 5000 peoples. Similarly Bijli Cotton Mills has generated employment to 1500 persons, having an investment of Rs. 225 lakhs. The other industries which have been generating employment to a large number of people are Prag Ghee Oil Mills and Glindia Glaxo Industries having an investment of Rs. 660 lakhs and 72.00 lakhs and production valued at Rs. 1390.00 lakhs and 2285 lakhs respectively.

From the foregoing analysis, it can be concluded that large and medium scale industry has played a vital role in the development of Aligarh district.

PROGRESS OF HANDICRAFT INDUSTRIES IN ALIGARH CITY, HATHRAS
AND SIKANDRA RAO:

Aligarh city has specialised artisans in Brassware Idol, Statue and Nakkashi of Handicraft Industries. Hathras city is famous for wooden, Carpet and Ghalicha and Sikandra Rao is popular for Momi Mothi.

The following table reveals the detailed account of Handicraft Industries in Aligarh city, Hathras and Sikandra Rao.

Table No. 5.5

PROGRESS AND ACHIEVEMENTS OF HANDICRAFT INDUSTRIES IN ALIGARH,
HATHRAS AND SIKANDRA RAO

(Rs. in Lakhs)					
Name of city	Name of units	No.of units	Capital invest-ment	Produc-tion	Employ-ment
Aligarh city	Brassware Idol, Statue and Nakkashi	125	74.06	422.71	599
Hathras	Wooden, Carpet Ghalicha	137	74.54	201.11	563
Sikandra Rao	Momi Moti	25	3.22	12.30	92

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) The figure for 1991 has been collected by the courtesy of Mr. T.P. Singh, DIC, Aligarh, November 19, 1992.

Table No. 5.5 reveals that till 1991 there were 125 Handicraft units in Aligarh city with an investment of Rs. 74.06 lakhs, providing employment to 599 persons. The total production valued at Rs. 422.71 lakhs. In Hathras the number of units in handicraft was 137, having an investment of Rs. 74.54 lakhs producing goods worth Rs. 201.11 lakhs and generating employment to 563 persons for the period under review. In Sikandra Rao there were 25 units with an investment of 3.22 lakhs. The value of production was Rs.12.30 lakhs and an employment opportunity of 92 persons during the same period.

Keeping in view the noted fact into consideration it can be concluded, that handicraft industries is flourishing well in Aligarh and Hathras and it is further expected that this will have good prospect in future.

PROMOTION AND DEVELOPMENT OF SMALL SCALE INDUSTRIES, LARGE AND MEDIUM SCALE INDUSTRIES IN ALIGARH DISTRICT:

Table No. 5.6 shows the details of number of units, capital invested, annual production and employment generated in Small Scale Industries, Large Scale and Medium Scale Industries of Aligarh district.

Table No. 5.6DEVELOPMENT OF SMALL SCALE INDUSTRIES, LARGE AND MEDIUM SCALE INDUSTRIES IN ALIGARH DISTRICT DURING THE PERIOD 1983 TO 1991

(Rs. in Lakhs)				
Name of Industry	No. of units established	Capital investment	Production	Employment
Small Scale Industries in Aligarh district	5920	4058.70	30434.86	23897
Large and Medium Scale Industries in Aligarh district	09	1511.00	4906.95	8875
Comparative difference in percentage	65677.78	168.61	520.32	169.26
Difference in number	5911	2547.70	25527.91	15022

Source: a) Compiled from Industrial Directory of Distinct Industry Centre, Aligarh 1990.

b) Figure 1991 same as table No. 5.2.

From the foregoing table indicates that the total number of units of Small Scale Industries in Aligarh district was 5920, with total investment of rs. 4058.70 lakhs providing employment opportunity to 23897 persons and produced the goods worth Rs. 636.12 lakhs for the period from 1983-1991. While the total number of large and medium scale industries in ligarh district in the year 1983 to 1991 was 9 with total investment of Rs. 1511.00 lakhs, providing employment to 8875 persons and total production valued at Rs. 520.32 lakhs.

In terms of percentage, the establishment of Small Scale Industries in Aligarh district was 65677.78 per cent, investment was 168.61 per cent, production was 520.32 per cent and employment was 169.75 per cent as compared to large and medium scale industries in Aligarh district. From the above analysis, it can be said that large and medium scale industries play a significant role in the development of Aligarh district.

GROWTH AND DEVELOPMENT OF HANDICRAFT INDUSTRIES AND SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT:

The following table gives an idea of number of units, capital investment, annual turnover and employment potential of handicraft industries and Small Scale Industries in Aligarh district.

Table No. 5.7

GROWTH & DEVELOPMENT OF HANDICRAFT INDUSTRIES AND SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT DURING THE PERIOD OF 1983 TO 1991

(Rs. in Lakhs)				
Name of Industry	No. of units established	Capital investment	Production	Employment
Handicraft Industries in Aligarh district	287	151.82	636.12	1254
Small Scale Industries in Aligarh district	5920	4058.70	30434.86	23897
Comparative difference in percentage	1962.72	2573.36	4685.22	1805.66
Difference in number	5633	3906.88	29798.74	22643

Source: a) Compiled from Industrial Directory of District Industry Centre, Aligarh, 1990.

b) Figure 1991, same as table No. 5.1.

Table No. 5.7 reveals that the total number of Small Scale Industries in Aligarh district was 5920 with a total investment of Rs. 4058.70 lakhs providing employment to 23897 persons, and the total production valued at Rs.30434.86 lakhs during 1991 while the total number of Handicraft Industries in Aligarh district was 287 with a total investment of Rs. 151.82 lakhs and employment opportunity for 1254 persons and total production was Rs.636.12 lakhs, for the period under study.

In terms of percentage the establishment of industries in Aligarh district Small Scale Industries was 1962.72 per cent, investment was 2575.76 per cent, production was 4685.22 per cent and employment was 1805.66 per cent at the end of 1991, as compared to handicraft industries in Aligarh district. From the foregoing analysis it can be observed that Aligarh district Small Scale Industries play a vital role in the development of Aligarh district.

CONCLUSION:

From the foregoing analysis, it can be observed that out of three types of industries in Aligarh district, i.e. Small Scale Industries, Large and Medium Scale Industries and Handicraft Industries, the pace of development of Small Scale Industries is more satisfactory.

After discussing the growth and development of Industries in Aligarh district, it is imperative to give an account of growth and development of all the three Industrial Estates viz., Aligarh city, Hathras and Atrauli in Aligarh district, which has been discussed in the succeeding chapter VI.

CHAPTER - 6

CHAPTER - VI

GROWTH AND DEVELOPMENT OF INDUSTRIAL ESTATES IN ALIGARH DISTRICT — AN ANALYTICAL REVIEW

The concept of Industrial Estates was originally conceived as a way out to overcome the difficulties of entrepreneurs. The idea of establishment of Industrial Estate was first seeded in 1962-63¹, in Aligarh District. The Directorate of Industries in Aligarh District provide necessary basic infrastructural facilities, such as, roads, drainage, water supply, street lighting and sewage to small scale industries in all three Industrial Estates, viz., Aligarh, Hathras and Atrauli. Besides, it also provides the following facilities:

1. Constructed sheds;
2. Marginal Money Loans;
3. Scheme report; and
4. Help in Marketing.²

There are seven mini Industrial Estates in Aligarh District which are situated in Sikandra Rao, Hathras, Sasni, Jawan, Khair, Chandaus and Iglas.³ These three Industrial Estates had 41 sheds in 1991 out of which 33 sheds were in working condition. In these Estates, 241 industrial plots were developed of which 206 were in working condition⁴. The total production of 282 Industrial units under the jurisdiction of

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1. Samiuddin, "Lead Bank Survey Report on Aligarh District", Canara Bank Head Office, Bangalore, pp. 33-34.
 2. Udogic Marg Darshika, District Industries Centre, Aligarh, p.4.
 3. Ibid, p.11.
 4. Statistical Bulletin, Economic & Statistical Department, State Planning Institute, U.P., 1991, p.83.

Aligarh District Industrial Estates valued at Rs.3571.84 lakhs in 1991.¹ These units comprise of different sizes, producing a wide-range of goods such as, readymade garments, plastics, cosmetics, engineering glassware, hosiery hardware goods, wood furnitures, steel furnitures, electroplates, locks, chemicals, metal goods for agriculture, metal goods for industries, and pipe etc. The total number of employment generated collectively by these Estate was 3253 till 1991 and similarly the total value of goods produced by them stood at Rs.3571.84 lakhs with total investment of Rs. 527.10 lakhs during the same period.

INDUSTRIAL PLOTS AND SHEDS :

Table No.6.1 gives a detailed account of the industrial plots and sheds developed by Directorate of Industries in Aligarh District.

TABLE NO.6.1
NUMBER OF INDUSTRIAL PLOTS AND SHEDS DEVELOPED BY
DIRECTORATE OF INDUSTRIES

S.No.	Item	1988-89	1989-90	1990-91
1.	No. of Estates	03	03	03
2.	<u>No. of sheds</u>			
2.1	Alloted	41	35	41
2.2	Working	31	30	33
3.	<u>No. of plots</u>			
3.1	Alloted	240	237	241
3.2	Working	206	137	206
4.	Average of employment in people	15	23	33

Source: Statistical Bulletin, Statistical Department, State Planning Institute Aligarh, U.P., 1991, p.83.

1. Industrial Directory, District Industries Centre, - Aligarh, 1990.

Table No. 6.1 reveals that the number of working sheds has gone down from 31 in 1988-89 to 30. The number of plots has also declined from 206 in 1988-89 to 137 in 1989-90. But, it is interesting to note that the average of employment has increased from 15 to 23 during the period under review.

In 1990-91 the number of working sheds has increased to 33 from 30 in 1989-90 and working industrial plots rose to 206 in 1990-91 from 137 in 1989-90. The average of employment has gone up to 33 in 1990-91 from 23 in 1989-90. This clearly shows that the Industrial Estates are very helpful in generating employment opportunities in the Aligarh District.

PROGRESS OF INDUSTRIAL ESTATES IN ALIGARH DISTRICT

An idea of the total number of industries established, capital invested, goods produced and employment generated in all the three Industrial Estates i.e. Aligarh city, Hathras and Atrauli, can be had from the following table:

TABLE NO. 6.2

NUMBER OF INDUSTRIES, CAPITAL, PRODUCTION AND EMPLOYMENT IN ALIGARH DISTRICT'S INDUSTRIAL ESTATES DURING 1983-1991.

(Rs. in Lakhs)				
Year	No. of Industries	Capital	Production	Employment
UPTO 1983	207	346.10	2581.56	2786
1984	15	26.70	202.80	66
1985	10	18.65	62.00	42
1986	14	25.74	44.75	70
1987	20	72.59	444.63	158

Contd...

1988	08	21.30	105.00	46
1989	03	6.87	36.00	21
1990	03	3.15	35.10	24
1991	02	6.00	60.00	40

Source: 'A' Compiled from Industrial Directory of DIC Aligarh 1990.

'B' The figure for 1991 has been collected from District Industry Centre, Aligarh, November 10, 1992.

Table No.6.2 reveals that right from the year of establishment till 1983, the total number of unit was 207, with an investment of Rs.346.10 lakhs providing employment to 2786 persons. The value of the total production during the same period was Rs.2581.56 lakhs. In the succeeding years till 1991 the establishment of industries was very slow. There were only 15 new establishment in 1984 with an investment of Rs.26.70 lakhs and production value at Rs.202.80 lakhs. In 1985 the number of new establishment further declined to 10 only with an investment of Rs.18.65 and the value of production was Rs.62 lakhs. In 1986, 14 units were established having an investment of Rs.25.74 lakhs with production valued at Rs.44.75 lakhs. In 1987 there were 20 units in which Rs.72.59 lakhs were invested and they provided the goods worth Rs.444.63 lakhs. In 1988, 8 units were established having an investment of Rs.21.30 lakhs with production valued at Rs.105 lakhs. In 1989 3 new units were established with an investment of Rs.6.87 lakhs and the value of production stood at Rs.36 lakhs. Similarly in 1990 new

establishments numbered only 3 with an investment of Rs.3.15 lakhs and production valued at Rs.35.10 lakhs. In 1991 only 02 units were established with an investment of Rs.6 lakhs and the value of production was Rs.60 lakhs and provided employment 40 persons.

From the foregoing analysis, it can be observed that although there has been slow growth of establishment of industries but there has been establishment of new industries every year and it is therefore hoped that even in the future too there will be a continuous establishment of industries on large scale to cope with the increased changing needs and requirements of the growing population in Aligarh District.

BREAK-UP OF NUMBER OF INDUSTRIES, INVESTMENT, PRODUCTION AND EMPLOYMENT IN INDUSTRIAL ESTATES OF ALIGARH DISTRICT.

Table No.6.3 shows the year-wise detailed break-up of number of industries, investment, production and employment of Industrial Estates, i.e. Aligarh city, Hathras and Atrauli Industrial Estates.

Table No.6.3 reveals the comparative picture of all the three Industrial Estates of Aligarh District. It indicates that Aligarh city has the highest number of Industries (158) followed by Hathras (86) and Atrauli (38) during the period from 1983 to 1991.

Table No. 6.3

BREAK - UP OF NUMBER OF INDUSTRIES, CAPITAL, PRODUCTION AND
EMPLOYMENT IN ALIGARH DISTRICT INDUSTRIAL ESTATES

Year	No. of Industries			Capital			Production			Employment						
	Aligarh	Hathras	Atrauli	Total	Aligarh	Hathras	Atrauli	Total	Aligarh	Hathras	Atrauli	Total				
Upto-1983	127	59	21	207	217.45	96.95	31.70	346.10	2026.70	457.50	97.36	2581.56	2140	515	131	2786
1984	07	05	03	15	9.30	15.25	2.15	26.70	67.70	125.00	10.10	202.80	39	20	07	66
1985	03	05	02	10	2.25	11.35	5.50	18.65	08.25	50.00	3.75	62.00	12	25	05	42
1986	06	05	03	14	18.09	6.40	1.25	25.70	21.00	17.50	6.25	44.25	30	20	20	70
1987	07	08	05	20	48.39	7.95	16.25	72.59	189.64	219.50	35.49	444.63	72	50	36	158
1988	Nil	04	04	08	—	10.20	11.10	21.30	—	80.00	25.00	105.00	—	20	26	46
1989	03	—	—	03	6.87	—	—	6.87	36.00	—	—	36.00	21	—	—	21
1990	03	—	—	03	3.15	—	—	3.15	35.10	—	—	35.10	24	—	—	24
1991	02	—	—	02	6.00	—	—	6.00	60.00	—	—	60.00	40	—	—	40
Total	158	86	38	282	311.50	148.10	67.50	527.10	2444.39	949.50	177.95	3571.84	2378	650	225	3253

Source: A) Compiled from Industrial directirt if D.I.C. Aligarh, 1990.

B) The figure for 1991, same as table No. 6.2.

In terms of capital investment the maximum capital of ₹.311.50 lakhs was invested in Aligarh Industrial Estate, ₹.148.10 lakhs was invested in Hathras and ₹.67.50 lakhs was invested in Atrauli during the period under study. The goods produced in all the three Estates, i.e. Aligarh, Hathras and Atrauli was valued at ₹.2444.39 lakhs, ₹.949.50 lakhs and ₹.177.95 lakhs and employment generated in these Estates was 2378, 650 and 225 persons respectively during the same period.

Thus, it can be said that Aligarh city Industrial Estates play a vital role in the development of Aligarh district by providing goods to the maximum extent and generating employment galore to large number of people.

ENTREPRENEURSHIP DEVELOPMENT PROGRAMME

District Industries Centre has conducted a number of Entrepreneurial Development programmes for the existing entrepreneurs and new enterprises. It has conducted 19 Entrepreneurial Development programmes at Tehsil level for six days, six Entrepreneurial Development programme at district level for 15 and one programme for 45 days¹ in one year time frame.

EDUCATED UNEMPLOYMENT SCHEME

A self employment scheme, for Educated Unemployed whose family income is below ₹.10,000 per annum and whose age

1. Udogic Marg Darshika, DIC, Aligarh, p.7.

is not below 18 years but not more than 35 years is being operated by the U.P. State Government in Aligarh District and Rs.15 thousands, 25 thousands and 35 thousands under different schemes have been provided to educated unemployed at a low rate of interest through the Nationalised Banks for business. so far, 350 persons have been benefited under this scheme every year.¹

TRAINING OF YOUTH FOR SELF EMPLOYMENT SCHEME (TRYSEM)

The financial help is provided to rural artisan through banks to establish their enterprise after imparting training in the rural areas.²

FUTURE PLAN FOR DEVELOPMENT OF INDUSTRIAL ESTATE IN ALIGARH DISTRICT

1- An Industrial Area in the name of Tala Nagri has been proposed to be established at Ramghat Road near the Vikas Bhawan and stadium for which 312 acre³ of land is being acquired, in which 846 number of plots are available on leased basis for 99 years, mainly for the small scale industries. Uptill now 786 plots have been allotted. The possession of these allotted plots would be handed over to the entrepreneurs on the first week of January 1994.

1. Udogic Marg Darshika, District Industry Centre, Aligarh, pp. 5 - 6.

2. Ibid, p.5.

3. Ibid, pp. 7-8.

ROLE OF STATE INDUSTRIAL DEVELOPMENT CORPORATION (SIDCO)

State Industrial Development Corporation (SIDCO) is providing developed plots to the small entrepreneurs of the units. A detailed break-up of the types of plots, number of plots, allotted plots and area of each plots have been given in the following table:

TABLE NO. 6.4TYPES OF PLOTS OFFERED/SIDCO PLOTS FOR TALA NAGRI

Types of plots	No. of plots	Alloted plots	Area of each plots in Sq. meter
A	12	4	4-5 thousands
B	16	8	18-25 hundred
C	100	93	1000
D	146	132	600
E	167	157	400
F	405	392	200
Total	846	786	

Source: By the courtesy of Mr. Jaswant Singh, Area Manager of Tala Nagri of UPSIDCO, Aligarh, June 30, 1993.

Table No. 6.4 reveals that these plots have been classified into six types i.e. A,B,C,D,E and F. The length of these types of plots (A,B,C,D,E & F) are 312 acres 'A' types of plots have the total length of 4 to 5 thousands square meter. 'B' types of plots have 18 to 25 hundreds square meter meter, 'C' types of plots occupy 1000 square meter and 'D' types 'E' types & 'F' types of plots have 600 square meter, 450 square meter plots and 200 square meter plots respectively mainly for the industrie in the rent of Rs. 180 per square meter. Besides these, there are some more plots in the total length of 72 square meter, 112 square meter; 162 square meter and 228 square meter for the housing purposes on the rent of Rs. 400 per square meter.

(2) MINI INDUSTRIAL ESTATES:

Aligarh district has seventeen blocks namely, Hathras, Iglas, Atrauli, Sikandra Rao, Sasni, Khair, Jawan, Dhanipur, Lodha, Gonda, Mursan, Akrabad, Hassayan, Gangiri, Bijoli, Tappal and Chandaus. One each mini Industrial Estate has been proposed in every block of Aligarh district. Now there are seven mini Industrial Estates established for the development of Industrial units in Sikandra Rao, Hathras, Sasni, Jawan, Khair, Chandaus and Iglas by the Directorates of Industries¹.

1. Udogic Marg Darshika, DIC, Aligarh, pp. 7-8.

A detailed account about the total number of plots available, allotted plots, unallotted plots, and rate per square meter of the mini Industrial Estates in Khair, Jawan and Sikandra Rao is given in the following table:

Table No. 6.5

TOTAL NUMBER OF PLOTS AVAILABLE, ALLOTTED PLOTS, UNALLOTTED PLOTS, RATE PER SQUARE METER OF MINI INDUSTRIAL ESTATES IN
KHAIR, JAWAN AND SIKANDRA RAO

Name of Industrial Estates	Total No. of plots available	Allotted plots	Unallotted plots	(Rs. in Lacks)
				Rate, per square meter (Rs.)
Sikandra Rao	51	26	25	131.30
Khair	40	34	06	124
Jawan	34	--	--	--

Source: By the courtesy of Mr. Subhash Mohan Gupta, Dealing Assistant of DIC, Aligarh, July 10, 1993.

From the above noted table it can be concluded that the total number of plots in Sikandra Rao is 51, followed by 34, Jawan and Khair 40. These plots are available for the development of Industrial units at the rate of 131.30 per square meter in Sikandra Rao and Rs. 124 per square meter in Khair. In Jawan plots were not allotted due to some conflicts against the Gram Panchayat regarding the possession of land.

(3) The Aromatic complex is going to be established by the Central Government at Salempur in Hathras block in Aligarh District, mainly for the chemical and oil Refinery Industries purpose¹.

ALIGARH CITY INDUSTRIAL ESTATE:

The Aligarh city Industrial Estate is situated near Exhibition ground, Rasulpur, G.T. Road, Aligarh at a distance of the two kilometers from Aligarh Railway Junction and approximately two kilometers from Aligarh Muslim University, Aligarh. It occupies an area of 35.43 acres of land. This Industrial Estate has 31 hire purchased sheds, 127 developed plots occupied by 158 Industrial units. The capital investment in the Estate is about Rs. 311.50 lakhs. The annual turnover is Rs. 2444.39 lakhs employing about 2378 persons².

Some of the important industries are Jobex India, Cyclo India, Narvi Locks, Bajaj Industries, Bajaj Lock Industries, Diamond Safe Company etc. (For detail see Appendix A).

1. Udogic Marg Darshika, DIC, Aligarh, pp. 7-8.

2. a) Information compiled from the Industrial Directory of district Industries Centre, Aligarh, 1990.

b) Figure for 1991 has been computed from the Table NO. 6.2.

TYPES OF PLOTS AND SHEDS OFFERED BY DIRECTORATE OF INDUSTRIES:

Directorate of Industries is providing developed plots and sheds to the small entrepreneurs of the units in Aligarh city. A statement about the type of sheds and plots and number of plots and sheds is shown in the following table:

Table No. 6.6

TYPES OF SHEDS AND PLOTS AND NUMBER OF SHEDS AND PLOTS IN
ALIGARH CITY INDUSTRIAL ESTATE

Type of Plots	Number of Plots	Types of Sheds	Number of Sheds
A	5	A	7
B	14	B	6
C	19	C	7
D	89	D	11

Source: By the courtesy of Mr. R.K. Gupta, Dealing Assistant of DIC, Alighr, July 10, 1993.

The above noted table reveals that there are 127 plots of all types of including A-5, B-14, C-19 and D-89 similarly the total number of sheds for all types of plots i.e. ABC & D is 31, A-7, B-6, C-7 and D-11.

RENT FOR SHEDS AND PLOTS:

In order to reduce the burden of the entrepreneurs in the initial year and also as incentives, the State

Government has decided to charge subsidised rent for sheds and plots. The average rent payable for sheds and plots for all types i.e. (A,B C & D) is Rs. 1 per-square meter or Rs. 12 per-square yard. The plots and sheds were given on lease basis usually for 99 years.

At present the State Government Rent of sheds and plots is Rs. 190 per square meter, and the private rent is Rs. 600 per-square meter. The difference between the two rates i.e. the Government and the private is on account of subsidy granted by the State Government.

ACHIEVEMENTS OF ALIGARH CITY INDUSTRIAL ESTATE:

Table No. 6.7 gives a detiled account of the number of Industries, capital investment, production and employment in Aligarh city Industrial Estates during 1983 to 1991.

Table No. 6.7

NUMBER OF INDUSTRIES, CAPITAL, PRODUCTION AND EMPLOYMENT IN
ALIGARH CITY INDUSTRIAL ESTATE

(Rs. in Lakhs)				
Year	No.of Industries	Capital (Lakhs)	Production (Lakhs)	Employment
Upto-1983	127	217.45	2026.70	2140
1984	07	9.30	67.70	39
1985	03	2.25	8.25	12
1986	06	18.09	21.00	30
1987	07	48.09	189.64	72
1988	--	--	--	--
1989	03	6.87	36.00	21
1990	03	3.15	35.10	24
1991	02	6.00	60.00	40
Total	158	311.50	2444.39	2378

Source: a) Compiled from the Industrial Directory of DIC, Aligarh 1990.

b) The figure for 1991, has been computed from the table No. 6.2.

The above mentioned table reveals that till 1983, there were 127 units, with an investment of Rs. 217.45 lakhs providing employment to 2140 persons. The total value of production for the same period was Rs. 2026.70 lakhs. In

the succeeding years the establishment of industries was very slow, as there were only 7 new establishments in 1984 with an investment of Rs. 9.30 lakhs and production valued at Rs. 67.70 lakhs. In 1985 the number of new establishments were only 3, with an investment of Rs. 2.25 lakhs and the value of production was Rs. 8.25 lakhs. In 1986, 6 units were established having an investment of Rs. 18.09 lakhs with production valued at Rs. 21.00 lakhs. In 1987 there were 7 units in which Rs. 48.39 lakhs were invested and they produced the goods worth Rs. 189.64 lakhs. In 1988 not a single industry came into existence. In 1989, 3 units were established with an investment of Rs. 6.87 lakhs and the value of production was Rs. 36.00 lakhs. Similarly in 1990 new establishments were only 3, with an investment of Rs. 3.15 lakhs and production valued at Rs. 35.10 lakhs. In 1991 only 02 units were established with an investment of Rs. 6.00 lakhs and the value of production was Rs. 60.00 lakhs and provided employment to 40 persons.

From the foregoing analysis, it can be observed that there has been continuous increase in the establishment of industries and it is further hoped that even in the future there will be a continuous increase in the development of industries.

INFRASTRUCTURAL FACILITIES IN ALIGARH CITY INDUSTRIAL ESTATE:

1. WATER:-

Water is obtained from the underground water resources within the Estate. There are one overhead tank and two tube-wells in and around the Industrial Area. Besides, water is also supplied daily by Jal Nigam, Aligarh. On average about 753.12 gallons of water are supplied every day from the overhead tank and tube-wells¹.

2. POWER SUPPLY:-

Power supply of different types i.e. high tension connection and low tension connection is provided by the U.P. Electricity Board directly to the Units, by the 6 transformers, with the capacity of one 1000 KVA, three 250 KVA one 400 KVA and one 100 KVA. The installed capacity of these transformers is 2250 KVA. The consumption is approximately 260179 units monthly².

3. ROADS:-

The total length of roads in the Aligarh city Industrial Estate is 10 kilometers with a perfect networks.

4. ALIGARH INDUSTRIAL ESTATE MANUFACTURING ASSOCIATION (AIEMA):

The AIEMA came into existence in 1968³. It deals with the common problems of their members, such as problems

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1. By the courtesy of Mr. Shukla Ji, Tube-well Operator, DIC, Aligarh, June 10, 1993.
 2. By the courtesy of Mr. Garg Babu, Dealing Assistan of Electricity Department of Industrial Estate, Aligarh, July 2, 1993.
 3. By the courtesy of Mr. Sita Ram Gupta, President of AIEMA, Aligarh, June 10, 1993.

of custom duties, electricity, commercial taxes, licence, excise duty. It also deals with certain agencies like banks, Telephone Department and other agencies and it makes proper arrangement of infrastructural facilities, adequate water supply to solve the raw material problem, Municipality problems and the problem of storing the rainy water.

5. There is one post office and one Bank (State Bank of India) in the area of Industrial Estate providing facilities to the entrepreneurs.

LOCATION OF HATHRAS INDUSTRIAL ESTATE:

The Hathras Industrial Estate is situated at Agra Road, Hathras, opposite to Mandi Samithy. It occupies an area of 28.09 acres of land¹. This Industrial Estate was established in the Third Five Year Plan. There are 86 industrial units in 86 developed plots, the capital investment in the Estate is Rs. 148.10 lakhs with an annual turnover of Rs. 949.50 lakhs. About 650 persons are employed in the Estate². Some of the important industries are Metal India products, Bharat Industries, Hathras Printing and stationery, Bharat Pharma and Chemical, Bharat Ayurvedic Works, Asian Paints India, Khandelwal Paper and Board Industries etc. (For detail see appendix B).

1. By courtesy of Mr. R.K. Gupta, Dealing Assistant in DIC, Aligarh, April 20, 1993.

2. Information compiled from the Industrial Directory of DIC, Aligarh, 1990.

PROGRESS OF HATHRAS INDUSTRIAL ESTATE:

The progress of Hathras Industrial Estate during 1983 to 1991 can be studied from the following table:

Table No. 6.8

NUMBER OF INDUSTRIES, CAPITAL, PRODUCTION AND EMPLOYMENT
OF HATHRAS INDUSTRIAL ESTATES

(Rs. in Lakhs)				
Year	Number of industries	Capital	Production	Employment
Upto-1983	59	96.95	457.50	515
1984	05	15.25	125.00	20
1985	05	11.35	50.00	25
1986	05	6.40	17.50	20
1987	08	7.95	219.50	50
1988	04	10.20	80.00	20
1989	--	--	--	--
1990	--	--	--	--
1991	--	--	--	--

Source: Compiled from Industrial Directory of DIC, Aligarh 1990.

The above noted table reveals that till 1983, there were 59 units with an investment of Rs. 96.95 lakhs generating employment opportunity to 515 persons. In the forthcoming years i.e. 1984 to 1988 the establishment

process of the Industries was very slow. But after 1988 onwards the progress of Industrial Estate in establishing industries was quite nil.

INFRASTRUCTURE FACILITIES IN HATHRAS INDUSTRIAL ESTATE

WATER SUPPLY:

In Hathras Industrial Estates, Hand Pumps are only the main source of water supply. There are 93 hand pumps in all in this Industrial Estate¹.

POWER SUPPLY:

Power supply is provided by the Uttar Pradesh Electricity Board directly to the industrial units, by the 4 transformers with total installed capacity 1000 KVA-one transformer of 400 KVA, two transformers of 250 KVA each and again one transformer of 100 KVA. The consumption of electricity by this Industrial Estate is about 98563 units per amonth².

ROADS:

The total net work of roads in Hathras Industrial Estate is about 6 kilometers³.

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1. By the courtesy of Mr. Shuklaji, Tube-well operator of DIC, Aligarh, June 10, 1993.
 2. By the courtesy of Mr. Garg Babu, dealing Assistant of Electricity Department Industrial Estate Aligarh, July 2, 1993.
 3. By the courtesy of Mr. R.K. Gupta, Dealing Assistant of DIC, Aligarh, April 20, 1993.

LOCATION OF ATRAULI INDUSTRIAL ESTATE:

The Atrauli Industrial Estate is situated in Patti Najafgarh in Atrauli at a distance of 35 kilometers from Aligarh Railway Junction and 37 kilometers from the Aligarh Industrial Estate. It occupies an area of 5.06 acres of land¹. Like the Hathras Industrial Estate, Atrauli Industrial Estate was also established during the Third Five Year Plan. It has 38 industrial units, occupying 10 hire purchased sheds and 28 industrial plots. The total investment in the Estate is about Rs. 67.50 lakhs². With an annual turnover of Rs. 177.95 lakhs. The Estate providing employment opportunity to 225 persons³. The important industries in Industrial Estate are R.A. Industries, Singh Agriculture Industries, Kamal Iron Industries, Rama Books Industries, Anjany Engineering works, Bhatia Dhatu Udyog, E.Y. and company and Gokul Enterprises. (For details see Appendix C).

ACHIEVEMENTS OF ATRAULI INDUSTRIAL ESTATE:

The progress of Industrial Estate during 1983 to 1991 can be seen from the following table:

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1. By the courtesy of Mr. R.K. Gupta, Dealing Assistant in DIC, Aligarh, April 20, 1993.
 2. Information compiled from the Industrial Directory of DIC, Aligarh, 1990.
 3. Ibid, 1990.

Table No. 6.9

NUMBER OF INDUSTRIES, CAPITAL, PRODUCTION AND EMPLOYMENT
IN ATRAULI INDUSTRIAL ESTATE

(Rs. in Lakhs)				
Year	No. of industries	Capital	Production	Employment
Upto-1983	21	31.70	97.36	131
1984	03	2.15	10.10	07
1985	02	5.05	3.75	05
1986	03	1.25	6.25	20
1987	05	16.25	35.49	36
1988	04	11.10	25.00	26
1989	--	--	--	--
1990	--	--	--	--
1991	--	--	--	--
Total	38	67.50	177.95	225

Source: Compiled from the Industrial Directory of DIC, Aligarh, 1990.

The above said table indicates that till 1983, there were 21 industries with an investment of 31.70 lakhs and providing employment opportunity to 131 persons. The total production valued at Rs. 79.36 lakhs during the same period. In coming years the establishment of industries was very

slow. There were only three new establishment in 1984 with an investment of Rs. 2.15 lakhs and the value of production was Rs. 10.10 lakhs. In 1985 number of new units were 02, with an investment of Rs. 5.05 lakhs and production valued at Rs. 3.75 lakhs. In 1986 only 3 industries were established having an investment of Rs. 1.25 lakhs with production valued at Rs. 6.25 lakhs. In 1987 there were 5 units in which Rs. 16.25 lakhs were invested and they produced the goods worth Rs. 35.49 lakhs.

After 1987, again there was decline in the establishment of new units. There were only 04 industries established in 1988. In 1989, 1990 and 1991 not a single industry was established. This stagnation in the establishment of industries during the said period would have been due to political unrest in the country as a whole and Aligarh District in particular.

INFRASTRUCTURE FACILITIES IN ATRAULI INDUSTRIAL ESTATE

1. WATER SUPPLY, ROADS AND POWER:

In Atrauli Industrial Estate, Hand Pumps are only the main source of water supply. There are 41 hand pumps in Hathras Industrial Estate¹. The total length of roads in the Industrial Estate, Atrauli is 4 kilometers². Power

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1. By the courtesy of Mr. Shuklaji, Tube-well operator, DIC, Aligarh, June 10, 1993.
 2. By the courtesy of Mr. R.K. Gupta, Dealing Assistant, DIC, Aligarh, April 20, 1993.

supply is provided by the Uttar Pradesh Electricity Board directly to the units, by the 2 transformers with the installed capacity of 350 KVA — one of 250 KVA and second one of 100 KVA. Consumption of power by this Industrial Estate is approximately 59532 units per months¹.

CONCLUSION:

The foregoing analysis, reads to draw a conclusion that Aligarh city Industrial Estate and Hathras Industrial Estate are progressing well.

The forthcoming chapter VII has been devoted to examine the role of Industrial Estate as compared to other industries in the development of Aligarh district.

1. By the courtesy of Mr. Garg Babu, dealing Assistant of Electricity Department of Industrial Estate, Aligarh, July 2, 1993.

CHAPTER - 7

CHAPTER - VII

ROLE OF INDUSTRIAL ESTATES IN THE PROMOTION OF SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT

The concept of Industrial Estates is as old as the steam engine but its systematic application to the challenge of the term is as new as the sputnic.¹ The first Industrial Estate to be set up was the Trafford park Estates limited called "The Mother of Industrial Estates" in the United Kingdom in 1896.² The programme of Industrial Estate was introduced in India towards the close of the First Plan Period, i.e. 1955.³ In Aligarh district, three Industrial Estates, viz., Aligarh, Hathras and Atrauli came into existence during the Third Five Year Plan period i.e. 1962-63.

Development of Aligarh district is an outcome of purposeful human activity. Men assume various roles in the development processes, namely, as organiser of human capital, natural material resources, worker, consumer and employing resources in a different way in doing new combination of means of production.⁴

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1. Bandopadhyay Kalyani, "Industrialisation through Industrial Estates", A pattern of economic decentralism, Bookland Private Limited, 1969, p.16.
 2. William Bredo, "Industrial Estates: Tool for Industrialisation", Asia Publishing House, Bombay, 1962, p.10.
 3. P.C. Alexander, "Industrial Estates in India", Asia Publishing House, New Delhi, 1962, pp. 4-5.
 4. Khairoowala, Z.U. "Entrepreneurial Development its concept and Growth", 1987, pp. 4-5.

This chapter is devoted to study critically the role of Industrial Estates in the development of Small Scale Industries in Aligarh district. Three Industrial Estates of Aligarh district viz., Aligarh, hathras and Atrauli Industrial Estates have been taken up for performance appraisal and the same have been compared with the performance of large, small and medium scale industries and Handicraft industries.

PROMOTION OF SMALL SCALE INDUSTRIES IN THREE INDUSTRIAL
ESTATES AND ALIGARH DISTRICT

Table No. 7.1 gives a profile of comparative details of number of units, capital investment, annual turnover and employment in three Industrial Estates of Aligarh district and in Aligarh district.

Table No. 7.1 indicates that till 1991 the total number of Small Scale Industries in Aligarh District was 5920 with a total investment of Rs.4058.70 lakhs providing employment to 23897 persons. The total production stood at Rs.30434.86 lakhs for the same period. While the total number of units in Aligarh district Industrial Estate was 282 with a total investment Rs.527.10 lakhs an employment opportunity for 3253 persons and a total production valued at Rs. 3571.84 lakhs during the period under review.

Table No. 7.1

COMPARATIVE STATEMENT OF THE DEVELOPMENT OF SMALL SCALE INDUSTRIES IN ALIGARH, HATHRAS, ATRAULI INDUSTRIAL ESTATES AND ALIGARH TILL 1991

(Rs. in lakhs)				
Name of city	No. of Units established	Capital investment	Production	Employment
Small Scale Industries in Aligarh district	5920	4058.70	30434.86	23897
Small Scale Industries in Industrial Estates Aligarh, Hathras and Atrauli	282	527.10	3571.84	3253
Comparative difference in percentage	4.76	12.99	11.74	13.61
Difference in figures	5638	3531.60	26863.02	20646

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) The figure for 1991 collected by the courtesy of Mr. T.P. Singh, DIC, Aligarh, November 10, 1992.

In terms of percentage, the establishment of industries in Aligarh district Industrial Estate was 4.76 per cent, investment was 12.99 per cent, production was 11.74 per cent and employment was 13.61 per cent when compared to the total number of industries in Aligarh District for the period under review. This shows a negligible contribution to the development of aligarh District Industrial Estate.

PROMOTION OF SMALL SCALE INDUSTRIES IN ALIGARH CITY
INDUSTRIAL ESTATE AND ALIGARH CITY

The following table shows the details of number of units, capital invested, annual turnover and employment generated in the Industrial Estate and of Aligarh city Industries:

Table No. 7.2

PROMOTION OF SMALL SCALE INDUSTRIES IN ALIGARH CITY
INDUSTRIAL ESTATE AND ALIGARH CITY, UPTO 1991

(Rs. in lakhs)				
Name of city	No. of Units established	Capital investment	Production	Employment
Small Scale Industries in Aligarh city	4809	2686.27	24356.75	15326
Small Scale Industries in Aligarh city Industrial Estate	158	311.50	2444.39	2378
Comparative difference in percentage	3.29	11.60	10.04	15.52
Difference in Figure	4651	2374.77	21912.36	12948

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) The figure for 1991 same as table No.5.1 & 6.2.

Table No.7.2 reveals that until 1991 the total number of small scale industries in Aligarh city was 4809 with a total investment of Rs.2686.27 lakhs providing employment to 15326 persons with total production of Rs. 24356.75 lakhs. Whereas the total number of units in Aligarh city Industrial Estate was 158 with total investment of Rs.311.50 lakhs, an employment opportunity for 2378 persons and a total production valued at Rs. 2444.39 lakhs during the period under study.

In terms of percentage, the establishment of Industries in Aligarh city Industrial Estates was 3.29 per cent, investment was 11.60 per cent, production was 10.04 per cent and employment was 15.52 per cent, when compared to the total number of industries in Aligarh city. This shows a very negligible promotion of small scale industries in Aligarh city Industrial Estate.

✓ PROMOTION OF SMALL SCALE INDUSTRIES IN HATHRAS INDUSTRIAL ESTATE AND HATHRAS CITY

Table No. 7.3 furnished data about number of units, capital investment, annual turnover and employment generated in the Industrial Estate of Hathras and of Hathras city.

Table No. 7.3

PROMOTION OF SMALL SCALE INDUSTRIES IN HATHRAS INDUSTRIAL
ESTATE AND HATHRAS CITY 1991

(Rs. in lakhs)				
Name of city	No. of units established	Capital invest- ment	Production	Employ- ment
Small Scale Industries in Hathras city	443	720.31	2806.37	2822
Small Scale Industries in Hathras Indust- rial Estate	86	148.70	949.50	650
Comparative Difference in percentage	19.4	20.64	33.83	23.03
Difference in figures	357	572.21	1856.87	2172

Source: a) Compiled from Industrial Directory of DIC, Aligarh 1990.

b) Figure for 1991 same as table No. 5.2

In the foregoing table it is discernible that till 1991 the total number of small scale industries in Hathras city was 443 with a total investment of Rs.720.31 lakhs providing employment to 2822 persons with total production valued at Rs.2806.37 lakhs. While the total number of units in Hathras Industrial Estate was 86 with a total investment of Rs. 148.10 lakhs, generating employment opportunity for 650 persons and a total production valued at Rs.949.50 lakhs for the same period.

In terms of percentage, the establishment of industries in Hathras Industrial Estate was 19.41 per cent, investment was 20.64 per cent, production was 33.83 per cent, employment was 23.03 per cent when compared to the total number of Industries in Hathras city. Thus it can be said that the rate of Hathras Industrial Estate in the promotion of small scale industries in Aligarh district has been very insignificant.

COMPARATIVE STATEMENT OF THE PROMOTION OF SMALL SCALE INDUSTRIES IN INDUSTRIAL ESTATE AND ATRAULI TOWN

Table No.7.4 shows the details of number of units, capital invested, annual turnover and employment generated in the Industrial Estate of Atrauli and Atrauli town.

The data set out in table No.7.4 reveals that the total number of Small Scale Industries in Atrauli town was 101, with a total investment of Rs.65.84 lakhs, providing employment to 553 persons with total production valued at Rs.147.95 lakhs until 1991. While the total number of units in Atrauli Industrial Estate was 38, with a total investment of Rs. 67.50 lakhs, employment opportunity for 225 persons and a total production of Rs. 177.95 lakhs for the period under study.

Table No. 7.4

COMPARATIVE ANALYSIS OF THE PROMOTION OF SMALL SCALE INDUSTRIES IN ATRAULI INDUSTRIAL ESTATE AND ATRAULI TOWN 1991

(Rs. in lakhs)				
Name of city	No. of units established	Capital investment	Production	Employment
Small Scale Industries in Atrauli town	101	65.84	147.50	553
Small Scale Industries in Atrauli Industrial Estate	38	67.50	177.95	225
Comparative difference in percentage	37.62	-2.52	-20.98	40.69
Difference in figures	63	-1.66	-30.45	326

Source: a) Compiled from the Industrial Directory of DIC, Aligarh, 1990.

b) Figures for 1991 same as table No. 5.2.

In terms of percentage, the establishment of industries in Atrauli Industrial Estate was 37.62 per cent, investment was (-) 2.52 per cent, production was (-)30.45 per cent and employment was 40.69 per cent when compared to the total number of industries in Atrauli town for the period under study.

COMPARATIVE ANALYSIS OF THE PROMOTION OF SMALL SCALE INDUSTRIES IN ALIGARH, HATHRAS AND ATRAULI ESTATES WITH HANDICRAFT INDUSTRIES IN ALIGARH DISTRICT

The following table shows the details of number of units, capital invested, annual production and employment generated in all the three Industrial Estates and Handicraft Industries in Aligarh district until 1991.

Table No. 7.5

COMPARATIVE ANALYSIS OF THE DEVELOPMENT OF SMALL SCALE INDUSTRIES IN THREE INDUSTRIAL ESTATE WITH HANDICRAFT INDUSTRIES IN ALIGARH DISTRICT UNTIL 1991

(Rs. in lakh)				
Name of industry	No. of units established	Capital investment	Production	Employment
Handicraft Industries in Aligarh district	287	151.82	636.12	1254
Small Scale Industries in Aligarh, Hathras and Atrauli Industrial Estates	282	527.10	3571.84	3253
Comparative difference in percentage	-1.74	247.19	461.50	159.41
Difference in number	-5	375.28	2935.72	1999

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) Figure for 1991, same as table No. 5.4 & 6.2

Table No.7.5 indicates that the total number of units in Aligarh district Industrial Estates was 282 with a total investment of Rs. 527.10 lakhs, providing employment to 3253 person and produced the total goods worth Rs.3571.84 lakhs until 1991, whereas the total number of handicraft industries in Aligarh district was 287 with a total investment of Rs.151.82 lakhs, employment opportunity for 1254 persons and total production worth Rs.636.12 lakhs for the period under review.

In terms of percentage, the establishment of industries in Aligarh district Industrial Estates was (-)1.74 per cent, investment was 247.19 per cent, production was 461.50 per cent, employment was 159.41 per cent as compared to the total number of Handicrafts Industries in Aligarh district for the period under study. From the foregoing analysis, it can be concluded that a significant role is played by Aligarh district Industrial Estates in the development of Aligarh district.

COMPARATIVE ANALYSIS OF THE PROMOTION OF SMALL SCALE INDUSTRIES IN ALL THREE INDUSTRIAL ESTATES OF ALIGARH DISTRICT WITH THE LARGE AND MEDIUM SCALE INDUSTRIES IN ALIGARH DISTRICT

Table No.7.6 shows the details of number of units, capital invested, annual production, and employment generated in all the three industrial Estates and of Large and Medium Scale Industries in Aligarh District until 1991.

Table No. 7.6

COMPARATIVE APPRAISAL OF PROMOTION OF SMALL SCALE INDUSTRIES
IN THE INDUSTRIAL ESTATES AND LARGE AND MEDIUM SCALE
INDUSTRIES IN ALIGARH DISTRICT UNTIL 1991

(Rs. in lakhs)				
Name of industry	No. of units established	Capital invest- ment	Produc- tion	Employ- ment
Promotion of Small Scale Industries in Industrial Estates	282	527.10	3571.84	3253
Promotion of Large and Medium Scale Industries in Aligarh District	09	1511.00	4906.95	8875
Comparative diff- erence in --- percentage	3033.3	-186.66	-37.38	-172.82
difference in number	273	-983.10	-1335.11	-5622

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) Industrial Director, DIC, 1990, p.1.

c) Figure for 1991 same as table No. 6.2

A close look at the above noted table shows that the total number of units in Aligarh district Industrial Estates was 282 with a total investment of Rs.527.10 lakhs, an employment opportunity for 3253 persons and a total production of Rs.3571.84 lakhs until 1991 whereas the total number of large and medium scale industries in Aligarh

district was only 9 with a total investment of Rs.1511.00 lakhs providing employment to 8875 persons and produced the total goods worth Rs.4906.95 lakhs for the same period.

In terms of percentage, the establishment of industries in Aligarh district Industrial Estates was 3033.3 per cent, investment was (-)186.66 per cent, production was (-)37.38 per cent and employment was (-)172.82 per cent as compared to the total number of large and medium scale industries in Aligarh district for the period under study. From the foregoing analysis it can be observed that Aligarh district Industrial Estates has an insignificant role in the development process of Aligarh district.

GROWTH AND DEVELOPMENT OF SMALL SCALE INDUSTRIES IN INDUSTRIAL ESTATES AND ALIGARH DISTRICT

Table No. 7.7 shows the growth of Industries in Aligarh district and Industrial Estates for the period 1983 to 1991.

Table No. 7.7

GROWTH AND DEVELOPMENT OF SMALL SCALE INDUSTRIES IN ALIGARH
DISTRICT AND INDUSTRIAL ESTATES DURING THE PERIOD
1983 TO 1991

(Rs. in lakhs)				
Year	Year-wise total num- ber of small scale industries in Aligarh district	Year-wise total Num- ber of small scale indus- tries in Industrial Estates	Total number SSI in Aligarh district	Total number SSI in Indus- trial Estates
Upto 1983	2200	207	2200	207
1984	291	15	2491	222
1985	365	10	2856	232
1986	475	14	3331	246
1987	477	20	3808	266
1988	510	08	4318	274
1989	458	03	4776	277
1990	699	03	5475	280
1991	450	02	5920	282

Source: a) Compiled from Industrial Directory of DIC, Aligarh 1990.

b) The figures for 1991 has been collected by courtesy of Mr. T.P. Singh, November 10, 1992.

The aforesaid table reveals that the number of small scale industries in Aligarh district has gone up to 5920 in 1991 from 2200 in 1983 - showing an over all increase of 169.09 per cent. The number of small scale industries of Industrial Estates has also registered an increase from 207 in 1983 to 282 in 1991 - indicating an overall rise of 36.23 per cent. It is therefore, also clear from the preceeding table that number of industries in Aligarh district has increased at a faster rate than industries in Industrial Estates during the period under study.

The reasons for slow growth of Industries under Industrial Estates of Aligarh district are attributable to limited number of plots availability, lack of sheds and tough conditions of leasing system.

CAPITAL INVESTMENT IN SMALL SCALE INDUSTRIES OF ALIGARH DISTRICT AND INDUSTRIAL ESTATES

Capital investment position of small Scale Industries of Aligarh district and Industrial Estates during the period 1983 to 1991 has been given in Table No. 7.8.

Table No. 7.8

CAPITAL INVESTMENT IN SMALL SCALE INDUSTRIES IN ALIGARH
DISTRICT AND IN INDUSTRIAL ESTATES DURING THE PERIOD
: 1983 TO 1991

(Rs. in Lakhs)				
Year	Year-wise investment in SSI in Aligarh District	Year-wise investment in SSI in Industrial Estates	Total Investment in SSI in Aligarh district	Total investment in SSI in Industrial Estate of Aligarh district
Upto 1983	1205.50	346.10	1205.50	346.10
1984	205.20	26.70	1410.70	372.80
1985	302.05	18.65	1712.75	391.45
1986	375.20	25.74	2087.95	417.19
1987	382.15	72.59	2470.10	389.78
1988	421.30	21.30	2891.40	511.08
1989	384.02	6.87	3275.42	517.95
1990	501.13	3.15	3776.55	521.10
1991	282.15	6.00	4058.70	527.10

Source: a) Compiled from Industrial Directory of DIC, Aligarh, 1990.

b) The figure for 1991 has been worked out by the Research Scholar by the courtesy of Mr. T.P. Singh DIC, Aligarh, November 10, 1992.

Table No. 7.8 shows that there has been continuous increase in the investment of Small Scale Industries of Aligarh district as well as of Industrial Estates throughout the period right from 1983 to 1991. The capital investment in Small Scale Industries of Aligarh district has increased tremendously from Rs. 1205.50 lakhs in 1983 to Rs. 4058.70 lakhs in 1991 - indicating an overall rise of 236.68 per cent. Similarly, the capital in Small Scale Industries of Industrial Estates has also gone up to 527.10 lakhs in 1991 from Rs. 346.10 lakhs in 1983 - reflecting an overall increase of 52.30 per cent. This proves that the growth of the industries in Small Scale Industries of Aligarh district has been five times higher than the growth of investment in Small Scale Industries of Industrial Estates.

Thus it can be concluded, that the growth of industries in Industrial Estates has been very insignificant and could not contribute much in the development of Aligarh district.

PRODUCTION PERFORMANCE OF SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT AND INDUSTRIAL ESTATES

The production performance of Small Scale Industries in Aligarh district and Industrial Estates during the period 1983 to 1991 can be studied from table No. 7.9.

Table No. 7.9

PRODUCTION PERFORMANCE OF SMALL SCALE INDUSTRIES IN ALIGARH
DISTRICT AND INDUSTRIAL ESTATES DURING 1983 TO 1991

(Rs. in lakhs)				
Year	Year-wise production in SSI in Aligarh district	Year-wise production in SSI in Industrial Estates	Total pro- duction in SSI in Aligarh district	Total production in SSI in Industrial Estates
Upto 1983	10221.25	2581.56	10221.25	2581.56
1984	1312.34	202.80	11533.59	2784.36
1985	2131.40	60.00	13664.99	2844.36
1986	2795.30	44.75	16460.29	2889.11
1987	2834.40	444.63	19294.69	3333.74
1988	2923.20	105.00	22217.89	3438.74
1989	2636.12	36.00	24854.01	3474.74
1990	3145.15	35.10	27999.16	3509.84
1991	2434.62	60.00	30434.80	3571.84

Source: a) Compiled from Industrial Directory of DIC,
Aligarh, 1990.

b) Figure for 1991 same as table No.5.2 & 6.2.

Table No.7.9 shows that the value of production of Small Scale Industries in Aligarh district has increased from Rs.10222.25 lakhs in 1983 to Rs.30434.80 lakhs in 1991- indicating overall rise of 197.76 per cent. Similarly the production of Small Scale Industries of Industrial Estate has gone up from Rs. 258.56 lakhs in 1983 to Rs. 3571.84 lakhs in 1991 - accounting an over all increase of 38.71 per cent. This shows that production performance of Small Scale Industries of Industrial Estates is not very significant when compared with the performance of Small Scale Industries of Aligarh district.

EMPLOYMENT OPPORTUNITY IN SMALL SCALE INDUSTRIES IN ALIGARH DISTRICT AND INDUSTRIAL ESTATES

Table No.7.10 reveals the employment opportunity in Small Scale Industries of Aligarh district and Industrial Estates for the period 1983 to 1991.

Table No. 7.10 reveals that in 1983 Small Scale Industries in Aligarh district have provided employment to 10,164 persons which rose to 23,897 persons in 1991.- indicating an overall increase of 135.14 per cent. Small Scale Industries of Industrial Estates have provided employment to 2786 persons in 1983 which rose to 3253 persons in 1991.—Showing an overall rise of 16.76 per cent.

Table No. 7.10

EMPLOYMENT IN SMALL SCALE INDUSTRIES OF ALIGARH DISTRICT AND
INDUSTRIAL ESTATES DURING THE PERIOD 1983 TO 1991

Year	Year-wise employment in SSI in Aligarh district	Year-wise employment in SSI in Industrial Estates	Total Employ- ment in SSI in Aligarh district	Total Employment in SSI in Industrial Estates
Upto 1983	10164	2786	10164	2786
1984	924	66	11088	2852
1985	1260	42	12348	2894
1986	1644	70	13992	2964
1987	1636	158	15628	3122
1988	1888	46	17516	3168
1989	2014	21	19530	3189
1990	2296	24	21826	3213
1991	2071	40	23897	3252

Source: a) Compiled from Industrial Directory of DIC,
Aligarh 1990.

b) Figure for 1991 same as table No.5.2 and 6.2.

This shows that the growth of employment in Small Scale Industries in Aligarh district has been very high as compared to the growth of employment in Small Scale Industries of Industrial Estates.

From the foregoing analysis, it can be concluded that Industrial Estates could not play a vital role in the development of Aligarh district.

SUMMARISED STATEMENT OF THE GROWTH AND DEVELOPMENT OF SMALL SCALE INDUSTRIES IN INDUSTRIAL ESTATES AND ALIGARH DISTRICT

Table No. 7.11 shows the details of number of units, capital invested, production and employment opportunity in all the three Industrial Estates and Aligarh district.

Table No. 7.11 indicates that the total number of Small Scale Industries in Aligarh, Hathras and Atrauli were 5353 with total investment of Rs.3472.42 lakhs providing employment to 18701 persons during the period from 1983 to 1991. The total production valued at Rs.37310.62 lakhs, while the total number of units in Aligarh district Industrial Estates was 282 with a total investment of Rs.527.10 lakhs generating employment opportunity for 3253 persons and total goods produced worth Rs.3571.84 lakhs during the period under review.

In terms of percentage, the establishment of industries in Aligarh district Industrial Estates was 5.27 per cent, investment was 15.18 per cent production was 9.57 per cent and employment was 17.39 per cent as compared to

TABLE NO. 7.11
COMPARISON OF THE DEVELOPMENT OF SMALL SCALE INDUSTRIES IN THE INDUSTRIAL ESTATES AND ALIGARH DISTRICT

Name of city	No. of Industries in Aligarh district	No. of Industries in Industrial Estate	Comparative diff. in %age	Capital investment in Aligarh district	Capital investment in Industrial Estate	Comparative diff. in %age	Production in Aligarh district	Production in Industrial Estate	Comparative difference in %	Employment in Aligarh distt.	Employment in Industrial Estate	Comparative difference in %age
Aligarh	4809	158	3.29	2686.27	311.50	1.16	24356.75	2444.39	10.04	15326	2378	15.15
Hathras	443	86	19.41	720.31	148.10	20.56	2806.37	949.50	33.83	2822	650	23.03
Atrauli	101	38	37.62	650.84	67.50	10.37	147.50	177.95	120.64	553	225	40.69
Total	5353	282	5.27	3472.42	527.10	15.18	37310.62	3571.84	9.57	18701	3253	17.39

Source: Same as table No. 5.2 & 6.3.

the total number of industries of Aligarh, Hathras and Atrauli for the period under study.

From the foregoing analysis, it can be observed, that the development of Aligarh district Industrial Estates is negligible as compared to Aligarh Small Scale Industries in terms of number of units size of capital invest, volume of production and number of employment.

Table No. 7.12 reveals that total number of Small Scale Industries in Aligarh was 5920 with a total investment of Rs. 4058.70 lakhs providing employment to 23897 persons for the period starting from 1983 to 1991. The total production valued at Rs. 30434.80 lakhs while the total number of units in Aligarh district Industrial Estates was 282 with a total investment of Rs.527.10 lakhs an employment opportunity for 3253 persons and total goods produced worth Rs.3571.84 lakhs for the same period.

In terms of percentage the establishment of industries in Aligarh district in Industrial Estates was 4.76 per cent, investment was 12.99 per cent, production was 11.74 per cent and employment was 13.61 per cent when compared to the total number of industries in Aligarh district for the period under review. The above analysis shows that the growth of industries in Industrial Estates has been very insignificant and could not contribute much in the development of Aligarh district.

SUMMARISE ANALYSIS OF NUMBER OF INDUSTRIES, CAPITAL INVESTMENT, PRODUCTION AND EMPLOYMENT OF ALIGARH DISTRICT AND INDUSTRIAL ESTATE

Table No. 7.12 shows the year-wise comparison of number of Industries, capital investment, production and employment in Aligarh district and Industrial Estates.

TABLE NO. 7.12

COMPARATIVE PICTURE OF INDUSTRIES, CAPITAL INVESTMENT, PRODUCTION AND EMPLOYMENT IN ALIGARH DISTRICT INDUSTRIAL ESTATE AND ALIGARH

DISTRICT DURING THE PERIOD 1983 TO 1991

Year	No. of Industries in Industrial Estate	No. of Industries in Aligarh district	Capital investment in Industrial Estates	Comparative diff. in %age	Capital investment in Aligarh distt.	Comparative diff. in %age	Production in Industrial Estate	Production in Aligarh distt.	Comparative diff. in %age	Employment in Aligarh distt.	Employment in Industrial Estate	Comparative difference in percentage
Upto 1983	207	2200	346.10	9.41	1205.50	28.71	2581.56	10221.25	25.26	10164	2786	27.41
1984	15	291	26.70	5.15	205.20	13.01	202.80	1312.34	15.45	924	66	7.41
1985	10	365	18.65	2.74	302.05	6.17	62.00	2132.40	2.91	1260	42	3.33
1986	14	475	25.74	2.95	375.20	6.85	44.75	2795.32	1.60	1744	70	4.26
1987	20	477	72.59	4.19	382.15	19.00	444.63	2834.40	15.66	1836	158	9.66
1988	08	510	21.30	1.57	421.30	5.06	105.00	2923.20	3.59	2088	46	2.44
1989	03	458	6.87	0.66	384.30	1.79	36.00	2636.12	1.37	2114	21	1.04
1990	03	694	3.15	0.43	501.13	0.63	35.10	3145.15	1.12	2496	24	1.04
1991	02	450	6.00	0.44	282.15	2.13	60.00	2434.62	2.47	2271	40	1.93
	282	5920	527.10	4.76	4058.70	12.99	3571.84	30434.80	11.74	23897	3253	13.61

Source: Same as Table No. 5.2 and 6.3.

CONCLUSION

To sum up, it can be concluded that the role of Aligarh city, Hathras and Atrauli Industrial Estates in the development of Aligarh district is insignificant as compared with the Small Scale Industries, Large Scale and Medium Scale Industries of Aligarh district. If compared only with the Handicraft Industries, it plays a vital role in the development in Aligarh district. Moreover, the over all role of Industrial Estates in the development of Aligarh district has not been very satisfactory.

In the foregoing pages the role of Industrial Estates in the development of Aligarh District has been discussed. Now the next chapter deals with the Summary and conclusion of study whereas Research scholar has given very constructive suggestions for the development of Industrial Estates of Aligarh district.

CHAPTER - 8

CHAPTER - VIII

CONCLUSIONS AND SUGGESTIONS

The conclusion and suggestions of all the chapters under study have been discussed in the following pages:

The chapter first deals with the objective of the study, Research Methodology and Review of Literature. The objectives of the study are as follows:

1. To study the concept and objectives of Industrial Estate.
2. To review the development of Industrial Estates in India during the plan periods.
3. To evaluate the performance and problems of Industrial Estates in the various states of India.
4. To review the growth and development of Industries in Aligarh district.
5. To evaluate the growth and development of Industrial Estates in Aligarh district.
6. To examine the Role of Industrial Estates in the development of Aligarh district.
7. To identify the problems and offer suggestions for suitable measures for the development of Industrial Estates in Aligarh district.

Many scholars have showed the various aspects of Industrial Estates of different States in India, R.Narayana, Jairam Krishnan, P.N. Sharma, D.P. Ghanghas, R.C. Paliwal, C.S. Herdenia, Manju Ghodke, Milap Chand, K.N. Srinivasan, S.M. Jaffar, P. Chattopadhyay and Anand Vardhan have studied

the performance and problems of Industrial Estates of Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir and Kerala, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and Delhi respectively. The present work is devoted to make a micro study of the role of Industrial Estates in the promotion of Small Scale Industries in Aligarh District.

The second chapter entitled "Industrial Estates:- A conceptual approach deals with the concept and objectives of Industrial Estates in India and abroad. Industrial Estate has been defined differently by different authors. Michael J. Wallace and Patrick J. Flynn has defined Industrial Estates as "an area in or around a city especially for offices and factories which is given for a low rent". William Bredo says that Industrial Estates is "a tract of land which is sub-divided and developed for individual enterprises". Rosentein Roxden is of the opinion that the Industrial Estate is "a developed tract of land which is not sold to entrepreneurs for their own building. It is leased out to the entrepreneurs for factory purpose". Industrial Estates are mainly intended for the development of Small Scale Industries and ancillary Industries, rural and backward areas. The other objectives of Industrial Estates are Slums clearance and relieving the cities from congestion by shifting industries from congested areas to conforming areas.

Moreover, the objectives of Industrial Estates differed from country to country and from time to time. The objectives of Industrial Estates in different countries, namely, Great Britain, United States, Canada, Puerto Rico, Northern Ireland, Pakistan, Hong Kong, Italy, Argentina, Brazil, Korea, Kenya, Tanzania, Uganda, Sri Lanka, Nepal and United Arab Republic have been dealt with at length. The objective of Industrial park and Industrial plaza in U.S.A. and Canada respectively were against the development of Small Scale Industries rather their objectives were to provide factory accommodation to industries as, Northern Ireland and Pakistan have also similar objectives as that of U.S.A. and Canada. Whereas attraction of foreign capital, technical know-how and entrepreneurship development are the targets of the Costa Rica, Puerto Rico, Trinidad, Tobago, Irish Republic and Malta.

Industrial Estates can broadly be divided into two parts: one is on the basis of location viz, urban, semi urban and rural and other one on the basis of Nature of the activities. The urban Industrial Estates are meant specifically for the entrepreneurs for establishing industrial units, allotment of sheds, plots etc. in the country, semi-urban Estates are those which are located in Small town having a population of 5,000 to 50,000 and Rural

Industrial Estates are those which are located in villages with a population of less than 5,000.

Besides these categories, Industrial Estates are also classified into five types viz, conventional Industrial Estates, Ancillary Industrial Estates, private Industrial Estates, Cooperative Industrial Estates, and Functional Industrial Estates. The Conventional Industrial Estates provide factory accommodation to wide-range of Small Scale Industrialists, and also encourages light engineering industries. The Ancillary Industrial Estates house units cater to the needs of large and medium scale Industries. The private Industrial Estates are more or less akin to cooperative Industrial Estates—the difference being only in the constitution of the agency implementing the scheme. The Functional Industrial Estates are organised for particular industry as opposed to an ordinary Industrial Estates which provide accommodation to a wide-range of small manufacturing concern.

The chapter third has been devoted to study the progress and achievements of Industrial Estates in India during plan periods. In First Five Year Plan, ten Industrial Estates were Planned to be set up in the states viz., Kerala, Tamil Nadu, Uttar Pradesh and West Bengal.

In the Second Five Year Plan, 110 Industrial Estates were sanctioned which were to be established in different states of the country. By the end of the Plan, 53 Estates were functioning, 14 more Estates were completed, but could not be started on account of some technical problems, twenty four Estates were under construction and 28 Estates were in the process of acquiring land.

Third Five Year Plan witnessed a great spurt in Industrial Estates programme as the demand for establishing Industrial Estates all over the country was enormously realised. Thus, 500 Industrial Estates of varying sizes and types were sponsored in rural areas.

The major emphasis during the Fourth Five year Plan was on the consolidation of Industrial Estates programme. However, 612 Industrial Estates were sponsored in this plan with an estimated expenditure of Rs. 15.73 crore.

The Fifth Five Year Plan envisaged an outlay of Rs. 24.97 crore for the Industrial Estates programme. Under this very plan construction of flatted factories was proposed. Industrial Estates, Industrial Cooperative and Public Sector undertakings, were also proposed to be established.

During the Sixth Five Year Plan Industrial Estates and Area programme got special attention in industrially backward areas. This plan envisaged an outlay of Rs. 616 crore for Small Scale Industries including Industrial Estates. In the Eight Five Year Plan, proposal has been accepted to adopt the Growth Centre approach as a suitable measures for industrial dispersal.

The chapter fourth has been devoted to evaluate the performance and problems of Industrial Estates in some Indian states and Union Territory. Industrial Estates in Arunachal Pradesh have been established at Itanagar, Naharlagun,, Pasighat, and Deomali by the Arunachal Pradesh Industrial Development and Financial Corporation (APIDFC) in 1989.

Assam had nine Industrial Estates with 229 sheds occupied by 94 industrial units, producing the goods worth Rs. 6.4 crore annually and providing employment to 2,000 persons till 1985.

Bihar state had 33 Industrial Estates, of that 6 Estates were under the control of Industrial Area Development Authority, 15 Estate were under Patna Industrial Area Development Authority, 07 Estates were under Darbhanga Industrial Development Authority, 5 Estates were in Ranchi,

4 were under North Bihar Industrial Area Development Authority, and one each under the control of Adityapur and Bokaro Industrial Area Development Authorities. These Industrial Estates had 966 sheds of which 867 sheds were allotted generating employment to 20,000 persons till 1985.

The state of Goa had 12 Industrial Estates with 4,231 Small Scale Units. The total investment amounted to Rs. 60.89 crore with an employment opportunity for 27,124 persons till 1990.

The Gujarat state had 117 Industrial Estates with 8663 sheds of which 8,275 were allotted to the entrepreneurs. The total investment in these Estates amounted to Rs. 1009.5 crore with a total value of goods and services worth Rs. 2,364 crore and total employment to 2 lakhs persons till 1985. In this state Ankleshwar and Vapi are the biggest Industrial Townships for chemical industries in Asia.

Himachal Pradesh Government had 16 Industrial Areas and 5 Industrial Estates, consisting of 66 medium and large scale units with a total investment of Rs. 200 crore and total employment for 11,000 persons.

However, numerous problems like communication system, mis-management, lack of technical and managerial

experience, lack of will power on the part of entrepreneurs are worth nothing.

Haryana State Government, Directorate of Industries, Haryana State Industrial Development Corporation Ltd. (HSIDC Ltd.) and Haryana Development Authority (HUDA) altogether has established 28 Industrial Estates, 4 Industrial Areas, and 7 Industrial Development Colonies in 1981. The Directorate of Industries is the only agencies which has established a large number of Industrial Estates in different parts of Haryana state. In 1982, the Directorate of Industries and developed 1092 plots of that 1011 plots were allotted to the entrepreneurs showing 92 per cent utilisation. During the same period the Directorate of Industries had developed 236 sheds of which 214 sheds were allotted to the entrepreneurs, indicating approximately 91 per cent utilisation. Besides various agencies like HUDA, HSIDC Ltd. are also engaged in developing the Industrial plots and sheds in the state of Haryana.

The entrepreneurs of Haryana State are confronted with so many problems like nepotism and corruption, non-availability of equipment and components, inadequate credit facilities, shortage of power, lack of metallic and other minerals, lack of marketing facilities etc.

Jammu and Kashmir State is one of the largest state in India which has constructed 17 Industrial Estates with 247 sheds and having a constructed area of 385.384 sq. ft. till 1991. However, non-availability of skilled labour and dearth of entrepreneurs impedes the growth of small scale industries in this Estate.

Karnataka state has a large number of small scale industries consisting of ancillary units engaged in manufacturing the parts and components required by large scale industries, such as, Hindustan Air Crafts Ltd. (HAL), Indian Telephone Industries (ITI), Hindustan Machine Tools (HMT) etc. The Government of Karnataka is keen in developing industrial sites and providing basic amenities like water, electricity etc.

Kerala Government has also developed some Industrial Estate viz., Veli in Trivandrum, Aroor in Alleppey, Edayar and Angamali in Ernakulam and Palghat. The Small Scale Industries are provided with land in these development areas of full payment or hire-purchase basis.

Madhya Pradesh state had 87 Industrial Estates, out of which 22 were urban Industrial Estates, 29 semi-urban Industrial Estates, and 36 rural Industrial Estates. Besides, there was a significant increase in the number of

Industrial Areas numbering about 125 with 12232 acres of land during 1983-84. There are number of regional agencies in the state which look after the growth of Industrial Areas and Industrial Estates.

The State Government is also trying to identify the Growth Centres from the point of view of potential for the industrial development. The Growth Centres identified are, Mandideep (Bhopal), Dewas (Indore), Rewa (Satna), Katni (Jabalpur), Retlam (Ujjain) etc.

It is interesting to note that Madhya Pradesh Government is providing favourable industrial environment for prospective entrepreneurs. Even then, there are number of lapses, such as, lack of banking facilities, problems of law and order, problems of substandard raw materials and lack of irrigation facilities which have slowed down the pace of development.

In the State of Maharashtra, Maharashtra Industrial Development Corporation (MIDC) is the chief organ set up in 1962 with a view to promote and accelerate the growth and development of industries all over the state. The MIDC's role in the development of Industrial Estates in Maharashtra is very significant, as it explores a new opportunities for entrepreneurs, provides developed plots with clear titles,

gives advise to the entrepreneurs regarding the initial investments and also provides regular water supply and housing facilities.

There were 68 Industrial Estates with 1151 units, 11895 sheds, 1823 plots for major segments, 1788 plots for small segments till 1987. The capital investment in all these Estates amounted to Rs. 400 crore with an annual turnover of Rs. 899 crore, and employment for 50,000 peoples. During Seventh Five Year Plan MIDC has proposed to set up 32 new Industrial Estates in different parts of the state. However, a number of problems like double octroi duty, lack of internal transport facilities and multiplicity of taxes etc. are faced by the 'entrepreneurs' in the Industrial Estates of Maharashtra State.

In the state of Manipur there were 18 Industrial Estates which were given on lease and hire purchase system to the entrepreneurs.

In the state of Meghalaya, Manipur and Dadra Nagar Haveli a number of Industrial Estates are engaged in the Production of handloom and handicrafts products. However, these Estates are industrially backward and need a special attention of the Central Government for their development.

In the State of Punjab, Jalandhar Industries Department had developed 4 Industrial Estates, one Industrial Development Colony, two Focal points and one Industrial Area with a total of 734 plots in 1985. There are also a good number of Industrial Estates in Ludhiana, Hoshiarpur, Amritsar, Ferozpur, Bhatinda, Gurdaspur and Patiala. The Industrial Estates in this State are also facing some problems like unfavourable political climate, erratic payment to industrialists etc.

Rajasthan state had 26 Industrial Estates till July 1985, in the name of Industrial Area, which are managed by Rajasthan Industrial Estates Development Corporation (RIICO). RIICO has been actively engaged in developing large number of Industrial Area in Rajasthan as it has developed 161 Industrial Areas in 6242 acres of land. RIICO has also established 5000 units in Industrial Areas and has spent approximately 25 crore on their development. It has developed 19670 plots on the acquired land of which 12033 plots have been allotted to the Entrepreneurs. The RIICO has also decided to provide housing complexes at different places in the state.

Tamil Nadu had 1355 worksheds and 1023 Tiny sheds, 1018 developed plots, 3000 number of units in 51 Industrial Estates, and providing employment to about 70,000 persons..

The total value of production was Rs. 140 crores during 1989.

In Uttar Pradesh there were 65 Industrial Estates with 1950 units, 282 sheds and 2704 plots of these 90 sheds and 2004 plots were allotted to the entrepreneurs in the Fifth Five Year Plan. The value of production of these Estates amounted to Rs. 20 crore and generated employment for 11500 per cent during the same period. In the Sixth Five Year Plan, there were 80 Industrial Estates, with 1190 sheds, 3000 developed plots, of which 936 sheds and 2244 plots were allotted to the entrepreneurs. These Estates produced the goods worth Rs. 75 crore and produced employment to 17050 persons.

Industrial Estates in West Bengal are administered by the Department of Cottage and Small Scale Industries. These Estates were established at Asansol, Durgapur, Haldia, Kalyani Kharagpur, Santaldih, Siliguri, Farakka, Cooch, Behar, Haora, and Bedge for accommodating different Industries. A Free Trade Zone has also been set up at Falta.

In Delhi Union Territory, the Delhi Small Scale Industries Development Corporation has developed 8 Industrial Complex, one (1) in phase-I and three (3) in phase II. The other 4 Industrial Estates are located at

Jhilmil, Tahirpur, Wazirpur, Lawrence road and Rohtak Road. There are 838 Industrial sheds, having a turnover of Rs. 15 crore and providing employment to 14000 persons.

In the chapter fifth a detailed account of growth and development of Small Scale Industries, Medium and Large Scale Industries and Handicraft Industries in Aligarh district has been give. There were 5920 Small Scale Industries in Aligarh district with a total invetment of Rs. 4058.70 lakhs, an employment opportunities for 23897 persons till 1991. The total value of production was Rs.30434.86 lakhs with an installed capacity of Rs. 7925.8 lakhs during the same period.

Till 1991, there were 11 large and medium scale industries 2 of them have been closed. Central Government Press is playing a vital role in the development of Aligarh district by providing employment to 5000 people. Similarly the other large and medium scale industries viz., Bijli Cotton Mills, Prag Ghee Mills and Glindia Glaxo Industries producing employment for large number of people as 1500, 600 and 600 respectively.

There were 287 handicraft Units in Aligarh district with an investment of Rs. 151.82 lakhs which have provided employment to 1254 persons till 1991.

The chapter sixth has been devoted to examine the Growth and Development of Industrial Estate of Aligarh district. Till 1991 there were 41 sheds out of which 33 sheds were in working condition. Besides, 241 industrial plots have been developed of which 206 were in working condition. The employment opportunity generated by all these sheds and developed plots was for 3253 persons till 1991. There were altogether 282 industrial units of different sizes, producing a wide range of goods. The total investment in these Estates was of the order of 527.10 lakhs and the total production in the Industrial Estates stood at Rs. 3571.84 lakhs.

The Industrial Estates of Aligarh district, viz., Aligarh city, Hathras and Atrauli have been studied at length in this chapter.

The idea of establishment of Aligarh Industrial Estate was first conceived in 1962-63. Till 1991, there were 158 small units with an estimated turnover of Rs.2444.39 lakhs per-year. Aligarh Industrial Estate is situated near Exhibition ground, Rasulpur, G.T. Road, Aligarh at a distance of two kilometers from Aligarh Muslim University, Aligarh and two kilometers from Aligarh Railway Station. It is situated in an area of 35.43 acres of land. The number of hire purchased sheds were 31, developed plots

were 127. The employment being generated by these sheds at plots was for 2378 persons till 1991. The average rent payable for sheds and plots for all types (A,B,C, & D) was fixed at Rs. One per square meter. Water is obtained from the underground water resources within the Estate. On an average 753.12 gallons of water is supplied every day from Over Head Tank. Power supply is provided by the Uttar Pradesh Electricity Board to the units. There are 6 transformers with a capacity of 1000 KVA, 250 KVA, 400 KVA and 100 KVA respectively. The consumption of electricity in these units is an average 260179 units per month. The Industrial Estate Aligarh has other facilities also like road stretching 10 kms, post office, bank etc.

The Hathras Industrial Estate is located at Agra Road, opposite to Mandi Samity in Hathras. It was established in the Third Five Year Plan and has a total areas of 28.09 acres of land with 86 units in 86 developed plots. The capital investment in this Estate stood at Rs.148.10 lakhs with an annual turnover of Rs. 949.50 lakhs till 1991. So far 650 persons have been employed in the Estate. In this Estate hand pumps are only the main source of water supply. There were 93 hand pumps till 1991. Power supply is provided by the Uttar Pradesh Electricity Board to the units.

The Atrauli Industrial Estate is situated in Patti Najafgarh in Atrauli at a distance of 35 kilometers from Aligarh Railway Station and 37 kilometers from the Aligarh Industrial Estate having a total area of 5.06 acres. It was established during the Third Five Year Plan. Till 1991, there were 38 industrial units, with a total investment of Rs. 67.50 lakhs, total productions of goods worth Rs. 177.95 lakhs and total employment for 225 persons.

One Industrial Area in the name of Tala Nagri has been proposed to be established at Ramghat Road near Vikas Bhavan for which 312 acres of land have been acquired, in which 846 plots are available for the purpose of allotment out of which 786 plots have been allotted.

Besides, seven mini Industrial Estates have been established one each in Sikandra Rao, Hathras, Sasni, Jawan, Khair, Chandaus and Iglas. The total number of plots available in Sikandra Rao. Jawan and Khair are 51,34 and 40 respectively.

The chapter seventh has been devoted to examine the role of Industrial Estates as to other Industries in the development of Aligarh district. In this context, Aligarh, Hathras and Atrauli Industrial Estates have been taken up for performance appraisal and the same have been compared

with the performance of Small Scale Industries and Handicraft Industries. These Estates altogether have 282 units, with a total investment of 527.10 lakhs, employment opportunities for 3252 persons and total production worth Rs. 3571.84 lakhs, till 1991. While in the same period Aligarh district had 5920 Scale Industries with a total investment of Rs. 4058.70 lakhs employment opportunity for 23897 persons and total production worth Rs. 30434.86 lakhs. It leads to a conclusion that performance of other industries of Aligarh district compared with the performance of Industries of Industrial Estates is more satisfactory and significant.

Handicraft Industries had 287 units with a total investment of Rs. 151.82 lakhs, employment opportunities for 1254 persons and total production worth Rs. 636.12 lakhs while Industrial Estates had 282 units with a total investment of Rs. 527.10 lakhs employment for 3253 persons production worth Rs. 357.84 lakhs. Thus, it can be said that Industrial Estates are playing a vital role, if compared with the role of Handicraft Industries.

Medium and Large Scale Industries and only 9 units with a total investment of Rs. 1511.00 lakhs, providing employment to 8875 persons and produced the total goods worth Rs. 4906.95 lakhs till 1991, while the Industrial

Estate had 282 units with a total investment of Rs. 527.10 lakhs employment opportunity for 3253 persons and total production of Rs. 3571.84 lakhs. This shows that the Role of Industrial Estates is very significant.

It is, however, observed that the role of Industrial Estates in the promotion of Small Scale Industries in the Aligarh district is insignificant if compared with the growth of Small Scale Industries of Aligarh district and significant, if compared with Large Scale Industries and handicraft Industries of Aligarh district.

On the whole, the study reveals that almost in all the states of the country the performance of Industrial Estates have been very satisfactory. These Estates have contributed significantly in the promotion and development of Small Scale Industries in India. In Aligarh district too, the role of Industrial Estates is very significant. Though they have not performed to the full potential on account of certain socio-political and economic reasons but still there is enough room for the improvement through various austerity measures to be taken up by the State Government as well as the Directorate of Industries of Aligarh district. In this regard following suggestions are made by the Researcher:

- (1) A technical information section and a industrial training institute, testing laboratories, general engineering workshops, common tool room, small industry extension centres, raw material depots and marketing agencies should be set-up in the Industrial Estates of Aligarh for the benefits of Entrepreneurs.
- (2) There should be a labour tenement for the works employed in various industrial units, who lived at far place from the Industrial Estates.
- (3) Uttar Pradesh, Public works department (UPPWD), should make an arrangement to construct an underground sewage system and smooth roads in the Industrial Estates of Aligarh district.
- (4) There should be a canteen, rest room, first aid centre and recreation centre under the control of one agency.
- (5) An arrangement should be made for telex, post office and banks in Hathras and Atrauli Industrial Estates.
- (6) In the Industrial Estates of hathras and Atrauli, the main sources of water supply is hand pump, so a provision should be made for tube-wells and over-head tanks for regular water supply.
- (7) The telephone lines fail during the rainy seasons, so the lines should be computerised.
- (8) Trouble free manufacturing environment, proximity to the market, availability of trained manpower in the Industrial Estates are the need of the hour.
- (9) The State Industrial Development Corporation (SIDCO) and Directorate of Industries should establish their branches throughout the country even at the district

level to develop new Industrial Estates and also to look after the problems faced by them such as lack of credit facilities, shortage of powers, lack of marketing facilities, lack of Industrial extension service. These working agencies should establish the separate department which will take necessary action for the removal of chronic problems of entrepreneurs.

- (10) SIDCO, or Directorate of Industries or some other similar agencies should also make an arrangement to supply the modern type of technology or machinery to the entrepreneurs instead of using indigenous machines.
- (11) Some members of Executive Committee of Aligarh Industrial Estate Manufacturing Association (AIEMA) should go to other successful Industrial Estates of big cities to find out the reasons of their development or should invite some experts for consultancy.
- (12) An efficient Transportation facilities, should be arranged by encouraging into Rickshaw service or bus services from all corners of the city, which will help a rapid development of Small Scale Industries in Aligarh Industrial Estates.
- (13) A few more Industrial Estates should be developed at a distance of 10 to 15 kilometers from Aligarh city in the areas such as, Anoopshahr Road, Iglas Road, Agra Road, Khair Road, Gonda Road, Delhi Road. The State Government, SIDCO, and Directorate of Industries should come forward to establish new Industrial Estate in the suggested areas.

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APPENDICES

APPENDIX-A

SOME OF THE IMPORTANT ENTREPRENEURS OF ALIGARH

DISTRICT INDUSTRIAL ESTATES

S.No.	NAME OF THE ENTERPRISES	ADDRESS
1.	National Small Industries Corporation	A-1 Industrial Estate Aligarh
2.	G.Y. & Company	A-2 " "
3.	Calbook Lal Hardware Company	A-3 " "
4.	Pilot Industries	A-4 " "
5.	Moris Bajaj Industries	A-5 " "
6.	Indra Sherta Card Board Manufacturer Industries	A-6 " "
7.	Wontin Forma	A-7 " "
8.	Malhotra Engineering Corporation	C-8 " "
9.	Bhagwan Das Harish Chand	A-9 " "
10.	Quality Furniture House	A-10 " "
11.	Das Steel Wests Products	A-11 " "
12.	Hicks Thermameter Industries Limited	A-12 & A-13 " "
13.	P.K. Engineering	B-1 " "
14.	United Steel Industries	B-2 " "
15.	Quality Electropolator	B-3 " "
16.	R.P. Locks	B-4 " "
17.	Cyclo India	B-5 " "

18.	Shri T. Electrical (Micro Industries)	B-6	"	"
19.	Chandak Brothers	B-7	"	"
20.	Govil Chemical Industries	B-8	"	"
21.	Rathi Engineering Works	B-9	"	"
22.	National Industries	B-10	"	"
23.	Laxmi Steel Co.	B-11	"	"
24.	Godani Krishi Udyog	B-12	"	"
25.	Agriculture Metal Industries	B-12 & B-13	"	"
26.	Bhartiya Krishi Udyog	B-15	"	"
27.	MahaVir Pipe Industries	B-17	"	"
28.	Chemical Industries	B-18	"	"
29.	Godani Enterprise	B-19	"	"
30.	Hari Steel Industries	C-1	"	"
31.	Ambay Enterprises	C-2	"	"
32.	Khurana Brothers	C-3	"	"
33.	Liberty Electricals			
34.	Builder and Hardware Manufacturing Co.	C-4	"	"
35.	Bajaj Lock Industries	C-5	"	"
36.	Jyoti Metal Industries	C-6	"	"
37.	Narvi Locks	C-7	"	"
38.	Automatic Enterprises	C-8	"	"
39.	Ravi Industries	C-9	"	"
40.	Locks & Tools	C-10	"	"

41.	Kaila, Kaila Enterprises	C-11 "	"
42.	S.K. Enterprises	C-12 "	"
43.	O.P. Industries	C-13 "	2
44.	Swadeshi Udyog Shalla	C-14 & C-15 "	"
45.	Laxmi Enterprise India	C-16 "	"
46.	Amit Traders	C-18 "	"
47.	Perfect Products	C-19 "	"
48.	Godani Industries	C-19 "	"
49.	Daweeka Engineering Industries	C-20 "	"
50.	Maheshwari Enterprises	C-24 "	"
51.	Mineral India	D-1 "	"
52.	Daimond Safe Company	D-2 "	"
53.	General Equipment Mart	D-3 "	"
54.	Chawla Industries	D-4 "	"
55.	S. Kumar Locks Industries	D-5 "	"
56.	Electrical Engineering Enterprises	D-6 "	"
57.	Fine Metal Works	D-7 "	"
58.	C.B.R. Enterprises	D-8 "	"
59.	U.P. Industrial Corporation	D-9 "	"
60.	S. Kumar Industries	D-10 "	"
61.	Bajaj Hardware/ Masquat Metal Industries	D-11 "	"
62.	Cyclo India	D-12 "	"
63.	Kumar Builders & Hardwares	D-13 "	"

64.	B.P. Wire Industries	D-14 "	"
65.	Bright Steel Industries	D-14 "	"
66.	Bright Steel Industries	D-16 "	"
67.	Polson Manufacturing Co.	D-17 "	"
68.	Quality Furniture House	D-18 "	"
69.	Jai Sawati Chemical Works	D-19 "	"
70.	New Swastika Chemical Works	D-20 "	"
71.	A.M. Products	D-21 "	"
72.	Jai Enterprises	D-22 "	"
73.	Rathi Industries	D-23 "	"
74.	Garg Industries	D-24 "	"
75.	Shyam Industries	D-25 "	"
76.	Apsara Food Products	D-26 "	"
77.	Nitin Negro Industries	D-28 "	"
78.	Harison Export	D-29 & D-30	"
79.	Agrawal Metal Industries	D-31 "	"
80.	Cockoo Enterprises	D-32 "	"
81.	Prime Salts Industries	D-33 "	"
82.	Assto Bright Industries	D-35 "	"
83.	Asia Company Industries	D-36 "	"
84.	Snio Farma	D-37 "	"
85.	Kohinoor Safe Works	D-38 & D-39 "	"
86.	Aristo Engineering Industries	D-40 & D-41 "	"
87.	Ram Industries	D-42 "	"
88.	Pirbha Engineering Works	D-43 "	"

89.	National Industries	D-44 "	"
90.	Kisan Agricultural Industries	D-45 "	"
91.	Buckeye Machine Pvt. Ltd.	D-46 & D-47 "	"
92.	Active Industries	D-49 "	"
93.	R.C. Gupta & Company	D-50 "	"
94.	B.R. Industries	D-51 "	"
95.	Pirbhakar Industries	D-52 "	"
96.	Uma Export	D-53 "	"
97.	Jobex India	D-55 "	"
98.	Harkut Udyog	D-56 "	"
99.	Alok Fuel Industries	D-58 & D-59 "	"
100.	Shabbir Ahmad Co.	D-61 "	"
101.	Cosmose Enterprises	D-61 & D-62 "	"
102.	Technico Enterprise	D-63 "	"
103.	Gupta Engineering Works	D-64 "	"
104.	Raj Industries	D-65 & D-66 "	"
105.	Goyal Brothers	D-67 & D-68 "	"
106.	Pilot Industries	D-69 & D-70 "	"
107.	Mashkoor Ahmad Co.	D-71	"
108.	Minrya Diloan	D-72 "	"
109.	Mac Tool India	D-73 & D-74 "	"

110.	Jain Lock & General Industries	D-76	"	"
111.	Jowala Ayurvedic Bhavan	D-77	"	"
112.	Nirmal Ayurvedic System	D-78	"	"
113.	Pankaj Pharmacy	D-79	"	"
114.	Jyoti Engg. Works	D-80	"	"
115.	Asia Trader Corporation	D-81	"	"
116.	Shri Balaji Trader & Engg.	D-82	"	"
117.	Shri Balaji Engg. Works	D-83	"	"
118.	Anupam Udyog	D-84	"	"
119.	Asia Trader	D-85	"	"
120.	Aristo Locks	D-86	"	"
121.	Rajneeti Enterprises	D-87	"	"
122.	Prakash Industries	D-94	"	"
123.	Satish Kuteer Udyog	D-95A	"	"
124.	Jai Jai & Company	D-59B	"	"

HATHRASAPPENDIX-B

1.	Agrawal & Industries	A-17	Industrial Estates, Hathras
2.	Bhagwati Prasad Sharma & Sons	A-12	" "
3.	Metal India Products	C-2	" "
4.	Orvo Industries	A-28	" "
5.	Bharat Industries Unit No. 1	A-2	" "
6.	Hathras Printing & Stationary	A-4	" "
7.	Asna Enterprises	A-11	" "

8.	Sham Plastic & Co. India	A-17	"	"
9.	Bharat Pharma & Chemical	A-5 & A-6	"	"
10.	Bharat Ayurvedic Works	A-5	"	"
11.	Mehta Rasainilshala	C-7,8 & C-9	"	"
12.	Hari Rice Mills	B-10	"	"
13.	Asian Paints India	A-12	"	"
14.	Raja Ram Soap & Chemical Works	A-12	"	"
15.	Deepak Glass Works	C-21	"	"
16.	Rajni Glass Industries	C-29	"	"
17.	Hari Glass Industries	C-20	"	"
18.	Khandelwal Paper & Board	A-31	"	"
19.	Dileep Industries	C-28	"	"

ATRAULIAPPENDIX-C

1.	Rama Books Industries		Industrial Estate, Atrauli
2.	R.A. Industries	10-11	" "
3.	Singh Agriculture Industries		" "
4.	Kamal Iron Industries	3-4	" "
5.	Anjany Engineering Works	A-5	" "
6.	Bhartiya Dhatu Udyog	A-29	" "
7.	E.Y. & Company	A-29	" "
8.	Gokul Enterprises	8	" "